From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: sigcom@juno.com (Stephen M Smith)
Subject: [1032] "free" parts III
Message-ID: <19961004.025626.10215.3.sigcom@juno.com>

This time it's VCRs. Yep, VCRs. What, you might ask, would a VCR have in it that a QRPer can use? Well, I'm here to tell ya.

My friend, Herb, repairs VCRs and other electronic things for a living. About 1/2 of them are beyond economical repair. When Herb comes across one that is ready for the grave, he scrounges out the parts that he can salvage to repair other like machines, then chucks the rest in the dumpster (OH NO!). More often than not, the problem is mechanical or electro-mechanical (read: just plain worn out). The electronics are usually just fine. Every once in a while, I get one to part out.

VCRs are full of neat stuff. Signal, power and zener diodes, small signal transistors, low and high power switching transistors, 3-leaded regulators, trim pots, trim caps., chokes, RF transformers, coils, resistors and capacitors. Older units have linear power supplies and fairly hefty power transformers and electrolytic caps. which might be useful for building a QRP transciever power supply. Later models use switch mode supplies and I don't know how usefull they might be (about 1/2 the time they're zapped anyway). The last VCR circuit board I got had supposedly been hit by a power surge. Every component that I pulled out tested good! One of the things that I found that I thought would be most usable by QRPers were the molded chokes. I got about 20 chokes in about 6 or 7 different values from one VCR. The RF transformers were intriguing, but I haven't had a chance to "ring" them out for their spec's.

Anyway, make friends with your local T.V. repair man. You might be able to con him out some of those old VCR chassis that are gathering dust in his shop for free. Another good place to find 'em is at yard sales, but please, don't spend more than a few bucks for one.

That's it for now. Happy scrounging.

73.......Steve, WB6TNL

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: George Gingell <k3tks@u1.abs.net>
Subject: [1087] "Twofer" Info
Message-ID: <Pine.BSI.3.93.961004155123.16909A-100000@u1.abs.net>

Hi Bob,

Now you are bringing back fond memories. The "Twofer" was a Club Project of QRP ARCI back around 1988, if I remember correctly. It was a simple Transmitter Design for 40 Meter CW by John Collins, KN1H. He was assisted on the project by Mike Bryce, WB8VGE and Mike Michael, W3TS. I think the kit of parts and circuit board went for about $20 delivered. A later issue had a schematic for a companion receiver which never really came to life. I think that was partly how it got the name "Two for the price of one"? Hence "Twofer", Later, it became so popular that everyone had a version and boards started popping up everywhere. Warning! NOT ALL TWOFERS ARE CREATED EQUALLY! Like I said, everyone who touched it seemed to want to put their "Mark" on it. I have three or four versions in my collection. I don't have any of the materials with me here at work. Actually, I do have a copy of the origional schematic in my desk, but no details on which issue of The QRP Quarterly it was from. I can find out when I get home if you really need that info. I also had a copy of the July 1992 QRP Quarterly in my desk. It has an article by N3CDR and another by WU2J with versions and/or modifications that they each did on the design.
I have a folder with notes on various versions which I was hoping to put together some day for a Commerative issue of it for the Quarterly.
The one important note that I do recall. Use a FT50-43 core for T1 in the Driver tank stage. I found that out the hard way when trying to make a version for 30 Meters. I recall smoking a few RFC's and burning some fingers on hot finals. :^)
Hope this is what you were looking for, I am sure others will be glad to help also.

72,73 es
QRP DX TU (C) 1986 G.Danny Gingell, K3TKS@.abs.net
Maryland Milliwatt Club QRP Reference Library,(301)572-6789

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dan Tayloe-P26412" <Dan_Tayloe-P26412@email.mot.com>
Subject: [1056] 229 from the Fox!
Message-ID: <M27284208.001.rgfj0.1.961004165718Z.CC-MAIL*/OU=SATCG/OU=AZBH/PRMD=MOT/ADMD=MOT/C=US/@MHS>

> Great job Brian! Here in Arizona the band was very quite last night, but propagation conditions where very poor into Wisconsin.
>
> I am using a 500' horizontal loop made of 28 gauge magnetic wire ("invisible" antenna), up about 25 to 40'. It is probably not a low angle of radiation device, but due to local housing covenant restrictions, it is about the best I can get away with.

Brian's signal was at best just barely above the noise at a 339.
My 2 watt signal rated a 229 from him. My hat's off for his ability
to copy my very weak signal.

Next time this happens, I am tempted to up the voltage on my rig to 24
volts to get an honest 5w. I am using a Serria-like design with an
IRF510 MOSFET as the final, which at 13.5v gets me about 1.8w out.
Everything in the xcvr runs off of regulated 8V except for the final,
so increasing to 24 volts increases my maximum power to just under 6
watts without really stressing anything else in the rig.

- Dan Tayloe, KK7BD, Phoenix, AZ QRPl #696

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [1070] 30m antenna
Message-ID: <M1086080.001.rlo50.1.961004185028Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Edgar WR8Z:
By now you have probably received several replies on a 30m antenna. I'm on the digest, so always a step behind everyone else.

I have two recommendations, depending on your circumstances.

I get good results from a half-square vertical. This is a half-wave flattop, with a quarterwave radiator hangin down from each end. It is fed in one of the two corners with 50-ohm line with a nice match.
The formulas that seem to work ar 492/f(MHz) for the flat top, and the regular 234/f(MHz) for the quarterwave radiators. I cut them a bit long, and then tune by folding the ends back on themselves. Allows for changes without need to cut or later splice back on.

The other recommendation is a diamond loop. I'm partial to diamonds, as they only require one center support. Imagine a regualr square full wave loop, then tilt it up into a diamond shape. If you feed it at the top or bottom, it will be horizontally polarized. Feed at the sides for vertical polarity. I use this antenna on 40m with great success.

There are lots of good antennas, but the real world has a way of intruding on our "druthers". You will have to survey your physical site limitations and opportunities to decide what will fit or can be supported.

72 and good luck,
Bob N6WG

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: jbennett@ebmud.com
Subject: [1016] 40m DX
Message-ID: <9610040459.AA15948@phantasm>

Hi gang - couldn't resist posting this one: Been doing the QRP thing for several months now, mostly with my OHR-400. Worked several states, but compared to my IC-775DSP, nothing really outstanding to say so far.

Well, tonight was different.... Listened on 80m for a while and heard a lot of nothing so came up to good 40m. Lotsa activity up here. Cruised down in the low end (7.010) and heard ZK1BWQ calling CQ Europe. This went on for several minutes, with him working no one. I finally broke down (shame on me) and called him with a /qrp pse at the end of my call. Darned if he didn't answer me on the first try! He was 589 here in Martinez CA AT 04:34Z, and he gave me a 439. I'm running 5w from the OHR-400 to a Hustler vertical on the roof, with 22 radials. Yes, there is nothing but water between me and The Cook Islands, but still - that's a looooong way for 5w!!!

72 & 73, Jim/N6PDX QRP-L #596, NWQRP #431
Martinez, CA

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: jim hale <kj5tf@mctc.com>
Subject: [1033] 49er Mobiling
Message-ID: <32552FB4.4A9@mctc.com>

The 49er from NorCal is allot of fun to build & operate more QRPers find out everyday. But has anyone taken a 49er for a ride?
Thursday 3 Oct. I parked my pickup on the outskirts of Fayetteville, Ar and called CQ from 22:20-00:45 UTC.
My first mobile QSO with the 49er was W9JVC Stu in La Salle, Il. he gave me a 549, and we could have rag chewed for 30min but he had a fone call. Next at 22:50 UTC comes WA5PVF, gave me 599 from Tyler, TX. K5IGW gave me a 579 at 23:16 from Monroe, La. Then Ar QRP member Bob AC5AM/QRP pulled me out of the QRM at 00:03, with a 339. My final QSO of the evening was K0EVZ/QRP of MN, Doc was running 5w.

I was useing a Hamstick 40M mobile antenna and parked in a clearing.

In the shack my 49er puts out almost a half watt @ 12.8v.

I just finished my 49er on tuesday and made afew QSO's at home, its got shack standard fittings like BNC for antenna, RCA phono for key, and DC coaxial for power.

Next I finish my 39er that I'm building from scratch with the NorCal board. Yep, I've got a 30M Hamstick, so look for me on 10.117mHz as well as 7.040mHz next wednesday Oct 9th. Same time frame as yesterday.

Thanks Wayne, N6KR, Jim Cates, Bob Kellogg, and those who made the 49er such a FUN project! 72/3'z de Jim AR QRP #2

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [1110] 6-9'er ???
Message-ID: <19961004.200756.4759.1.wb2vuo@juno.com>

It's an interesting thought, and should be possible to achieve. The NE-602 and similar was designed for cordless phones, and they're on 49 MHz, mostly.

There really is a need for a simple DC transceiver for 6 and/or 2 Meters. The hardest thing in such a beast would be keeping the parts count low, in the LO, and still having an acceptable spectral purity.

Yes, I know that the Kanga R-2/T-2 or equivalent will run up there, but it's a bit pricey for someone that wants to get on the band cheap. Something like the NN1G-type transceivers would be great. I am sketching something up for consideration, and checking out available Xtals for filters.

One thing to consider is the bandwidth. Seriously, most of the CW contacts made are with SSB stations, as the SSB ops will listen carefully for a weak CW station (especially if it is a new, or potentially new grid), so a bandwidth for SSB would be desirable. The RX should be in the USB mode so that cross-mode QSO's can be done, and the tuning range should cover from 50.050 - 50.200 MHz minimum. There is a DX Window (50.100 - 50.125 MHz), which is limited to DX calling DX, DX calling USA and USA calling DX. Domesitc QSO's in this range are discouraged. The de facto calling frequency on 6 Meter (Stateside) is 50.125 MHz, and gets used for SSB and CW. The CW sub-band is 50.000 - 50.100 MHz, with beacons from 50.050 - 50.080 mHz, and random CW activity in the 50.080 - 50.100 MHz range, usually at the top edge of this area. Beams are the standard antler, but a small (2 -

4 El) Quad can be spun with a regulat TV rotor with no problem...

I am borrowing the docs from the NN1G-series rigs, and I will post my
ideas when I have something smoothed out...

72/73, Keith, WB2VUO, QRP-L #582
EMPS Q=4 S=1 DX=0
Trustee, KB2YTW/B 10 Mtr Beacon (28.2860 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: bruce muscolino <w6toy@pop.erols.com>
Subject: [1024] 80 Meter Beacon?
Message-ID: <199610040950.FAA27393@smtp2.erols.com>

Did anyone else hear a weak beacon last night on 3581 kHz? Between 0110 and
0115 UTC on 10/4/96 I heard the following on 3581 kHz:

           VVV VVV VVV DE FDG FDG FDG AR

The signal was very weak, about a 319 and I had to listen through several
cycles before I could copy the whole thing. The message was repeated
continuously at about 15 wpm. Anyone know what/who this is and where?

73,

Bruce -- W6TOY/3
Silver Spring, MD
Still QRP, Really! (c)
--
Bruce -- W6TOY/3
QRP, Really! (c)

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [1072] Acoustic speakers
Message-ID: <M1086081.002.rlo51.1.961004185028Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Ok, now you did it. You got me going too. I've been tinkering with the

acoustic speaker idea for the last couple of years, not so much for great selectivity, but to cut down on background noise. Of course, any incidental selectivity is gratefully received.

Like the others who have posted, I tried a variety of tubes for the bodies. Then at a NORCAL club meeting, another ham brought in his acoustic speaker using a piece of black plastic sewer pipe about 4" in diameter, maybe 10-12 inches long. Not one to let a good idea go uncopied, I tried it myself with a good 4" speaker from a commercial two-way radio (about a 10w speaker, I recall). Speaker was mounted to the back of the tube with small L brackets. I used two short mounting feet at the rear, and one long mounting foot (leg?) at the front so it is always stable. CW reception was good. Not a pronounced audio peak, but a good low-pass characteristic which really cut down the background noise.

Now, I think I'm going to try the tuning plug idea, and see if it can be sharpened up some as well.

72,
Bob N6WG

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Dale LeDoux <dledoux@laci.net>
Subject: [1106] acoustic tuning
Message-ID: <1.5.4.16.19961004172108.400fd71a@laci.net>

Interesting stuff about acousticly tuned speakers. It reminds me of something I used to deal with years ago in my mis-spent youth: tuned exhaust systems for motorcyle engines. These things depended on acoustic characteristics to increase the efficiency of exhaust flow. The rule I heard reiterated time and again was that a short, wide pipe could have the same tuned RPM (frequency?) as a long narrow one, but that the short, wide system would have a broader power band (wider bandpass?). Then I ran across and article about building a tuned microphone which used various lengths of PVC pipe to allow selection of the response frequency.

Can we indeed have a sharp acoustic bandpass filter by using a long, narrow tuned cylinder?

Dale LeDoux
Bath Electrical Systems
Power Specialists -- 480 V to 230 KV
KD5QI

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Scott Bauer <ke3nv@erols.com>
Subject: [1120] Alda 103
Message-ID: <199610050351.XAA23741@smtp2.erols.com>

  Has anyone ever heard of a rig called the " Alda 103 " . It seems to be a QRP rig. It runs on 14.0, 7.0, 3.5 both SSB and CW. It is made in the U.S.A. it appears to be pretty old, but has no tubes.

 I have no need for this rig and would like to trade it for an un-built kit. I know that it powers up. It seems to only recieve strong signals though. I opened it up to have a look see. It is very clean inside. Has abt 5 boards in it. I have not tried to transmit with it as I am not sure how much power it needs. It has a really neat gear driven tuning capacitor.

 I cant promise that this rig is in complete working order. It was given to me, and I have never used it. 72, Scott
::
Fists 1502, ARCI 8804, G-QRP 8773, Nor-Cal 1094, NE 348, CQC 352

                              Scott Bauer ke3nv@erols.com

::

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [1047] Another FOX bites the dust
Message-ID: <M1085526.001.rcvs0.1.961004154039Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/PRMD=MOT/ADMD=MOT/C=US/@MHS>

Great job, Brian. Caught you early in the evening before the local noise level came up. Heard you after off and on through the evening as QSB came in and out. Often the stations working you were all I could hear. If many of us were as weak to you as you to us, you did a great job pulling us through. Thanks.
72, and Set Up The Next Fox (SUTNF)
Bob N6WG

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Scott Bauer <ke3nv@erols.com>
Subject: [1076] Antique volt/amp meter
Message-ID: <199610041941.PAA10515@smtp2.erols.com>

 I have a very old " voltammeter " made by Hoyt Electrical Instrument Works.
The Company is out of Penacook, NH. The pat. date is April, 13. 1920.
This is a really neat piece. It is mounted on a wood base. The whole face turns
to select between 3 volts, 30 volts, 30 amps, 3 amps and 90 mil-volts.

 This old meter still works but the needle is a little sticky. I have not
opened
it up to see what it looks like on the inside yet.

 I wonder if anybody knows anything about this old piece, and if it has any
value. It sure is a neat conversation piece. 72/73 Scott
::
Fists 1502, ARCI 8804, G-QRP 8773, Nor-Cal 1094, NE 348, CQC 352

                              Scott Bauer ke3nv@erols.com

::

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: earwax@indy.net
Subject: [1061] ARCI
Message-ID: <199610041738.MAA10688@IndyNet.indy.net>

Could some one please forward me ARCI's address.

Thanks for any help.

73 es etc...

Charlie

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Tim Cook <timcook@erinet.com>
Subject: [1109] Audio Filter for a QRP Rig
Message-ID: <3255AB40.7A32@erinet.com>

I have a datong fl-3 audio filter that i was using with my OHR classic,
and other QRP rigs. It has auto-notch, manual notch, hp/lp/bp filters.
It was the best of the audio filters in its day. It still sells for
about $260 in the EEB catalog. It works fine and looks fine. I am
selling it because I am buying a timewave DSP filter. I will sell the
FL-3 for $100 plus shipping. please email direct if you want more
information. I am putting it on here for sale as there seems to be a lot
of interest in outboard filters ie;Radio shack DSP, and others..
thanks
Tim
NZ8J

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Brian Cieslak <bcieslak@merge.com>
Subject: [1042] Corrrection to fox log
Message-ID: <199610041503.KAA00161@world.merge.com>

The first QSO was with NQ7X, floyd and I worked NQ7K later too...Just a typo
when transposing the log...Congrats Floyd.

Chuck, make note.

Brian

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Peter Barville <peter@barville.demon.co.uk>
Subject: [1085] CT3/G4MQC/P QRP
Message-ID: <eoKhrCA9xVVyEwph@barville.demon.co.uk>

Maybe I'm having problems with GQRP-L at the moment, but I haven't seen
the posting I put in yesterday about CT3/G4MQC/P QRP. In case you
haven't seen it either, let me repeat the info here:

I worked Stan yesterday evening (Thurs) around 14060 at 1804z. He was

peaking rst 559 running 2 watts into a G-Whip (mobile antenna) 'out of the hotel window'. I know he planned to borrow a 12v battery (to use as a psu) when he got there, but said during the qso that he had "some psu problems". Don't know more than that, but hope he will be active on 20m (and other bands) before he returns home on Wednesday. Good luck.
72
--
Peter G3XJS

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Marshall Emm <75230.1405@CompuServe.COM>
Subject: [1097] Disappointment
Message-ID: <961004213204_75230.1405_HHB83-1@CompuServe.COM>

Disappointment followeth upon disappointment here in Denver. First, I failed to work
Brian last night -- most I ever heard from him would have been worth a 1/1/9 report (nobody else here could even hear him). Probably it was just about an hour too late for the band
condx.

Then today I got my HPM-127 certificate from the ARRL in the mail, and the evidently chose to ignore my request that it be endorsed for QRP CW. Not even a note to say "sorry, no can do." So mine's the same as the Kw SSB ex CBer's, but at least *I* know what it took to earn it.

Oh, well, it's Friday, so I've got a whole weekend to look for some successes!

73
Marshall
AA0XI

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Brian Cieslak <bcieslak@merge.com>
Subject: [1086] Final log from FOX#2
Message-ID: <199610042009.PAA11719@world.merge.com>

You folks are so detail oriented and caught a couple of typo's. So here's the final edition of the log....Floyd's call is NQ7X and Doug's is KI6DS.

Many thanks for all the kudoes...CU all next week in the HUNT

Brian AE9K

October 4, 1996 - AE9K / FOX

NQ7X	559	AZ	Floyd	1:56
KK6MC	339	NM	Jim	2:01
WA7FCU	559	UT	Bob	2:03
N6ULU	559	CA	Stan	2:06
WB5QYT	559	NM	Tom	2:08
N6WG	339	CA	Bob	2:10
KU7Y	559	NV	Ron	2:11
KK7BD	339	AZ	Dan	2:19
AB5OU	559	NM	Tim	2:22
VE7CQK	329	BC	Paul	2:28
WB5QMP	339	ID	Randy	2:31
KI6DS	339	CA	Doug	2:34
KC7NEV	429	AZ	Joe	2:40
AK1P	339	CA	Paul	2:43
AA7QY	449	AZ	Roger	2:49
KI7MN	339	AZ	Bob	2:53
NQ7K	559	AZ	Mike	2:54
WB4ZKA	339	AZ	Mike	3:05
AB6DG	559	CA	John	3:13
W6BAB	559	CA	Harvey	3:19
K1MG	559	CA	Mike	3:22
WA6NAE	229	CA	Dwight	3:27
KQ6AG	229	CA	Dennis	3:58

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: ji3m@scubed.com (James R. Duffey)
Subject: [1091] Fox
Message-ID: <v02130500ae7b2c4d7ed2@[192.31.66.229]>

AE9K was weak in here when he started at 0200 Z, but I called anyway and he came back. His signal grew to 559 by 0215 Z and then faded out by 0245 Z. Hounds of note heard here in NM were N6ULU with his usual monster 599 signal, KI6DS close behind, KU7Y, N6WG, VE7CQK, and AK1P. The band was nice here with an S3 noise level. At times it seemed that the hounds were hearing Brian better than he was hearing the hounds. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest, NM 87008

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: SYDV00A@prodigy.com (MR FLOYD E SMITHBERG)
Subject: [1019] FOX #2
Message-ID: <199610040706.DAA26564@mime4.prodigy.com>

Working the FOX from Phoenix tonight was ruff. Heard him and 'thought'
I worked him at 0202Z but QRM/QRN made it very questionable. QSB took over
and from 0208 until 0238 there was practically NO copy. Then around 0240 he
came up again and at 0248 gave him 559 and got 449. By 0300 he had again
faded to no copy. Heard here were: N6ULU, N6WG, KU7Y, KI6DS, KC7NEV, AK1P,
W9OR, NQ7K. Used NC40A 5W, 35' vert ant.
Thanks Brian...
Floyd NQ7X   Phoenix ScQRPion

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [1015] Fox #2 snagged
Message-ID: <Pine.SUN.3.91.961003224557.24504A-100000@kitsune.swcp.com>

Hi Brian, Thanks for the contact! Conditions were better for me tonight
than last night. Less qrm and qrn tonight. I thought you would be better
on my vert. but you were better on the dipole.Heard KI6DS call you
shortly after I worked you. Doug, you sounded good into Albuq.Where was
everyone tonight????Didn't hear the pileup that I heard last night. Good
job Brian! 72 Tom WB5QYT

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [1049] Fox #2: High stress hamming
Message-ID: <200007040106.UAA28710@multi2.pic.net>

Whew! I'm not sure my nerves are gonna take it.

Yesterday morning I was one for one in the fox hunt.

Yesterday evening was family night at my daughter's school. It looked like
I was gonna miss fox number 2, but we got home with a few minutes to spare
before the fox was scheduled to disappear. I tuned around. I heard
nothing. I tuned some more. Still nothing. Then, faintly, I heard "rst,
state, name, nr xxx". It wasn't Brian, but I knew he had to be there
somewhere. I listened. I heard nothing. I tuned off and retuned the
antenna. I tuned back and listened. Nothing. I squeezed my ears. I
dimmed the lights and wrinkled my forehead. I turned on my ESP filter.

There, what was that? A slight rise in the background noise? Or a QRPer? Minutes later, I started to hear a few letters without the ESP filter. A few minutes after that I heard the reply, " K1MG tu ur 339 wis name brian nr 58". My blood pressure started to subside. My breathing spontaneously resumed. Is this fun? Or is it torture? Or is it tortuous fun? All I know is that I'm hooked, but I don't know if my nerves are gonna take it.

My compliments to Tim and Brian. You've both done a beautiful job. (Especially because I caught you both! ha!)

See you next week.

Mike K1MG

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Dick Schneider <74602.3317@compuserve.com>
Subject: [1013] FOX A BUST TNI!
Message-ID: <961004041225_74602.3317_EHH90-1@CompuServe.COM>

Mr. Fox was a bust tonight in Denver. Heard CA and AZ stations calling AE9K but heard nothing from Brian.

 Dang!

 72 Dick AB0CD..

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Randy Foltz <rfoltz@wsunix.wsu.edu>
Subject: [1035] FOX and RS DSP
Message-ID: <Pine.OSF.3.95.961004070233.3617B-100000@unicorn.it.wsu.edu>

Last night around 0130 I work the FOX. Brian was doing a fine job and I gave him a 339. After working him, I plugged the Radio Shack DSP into the NorCal 40A and used headphones on the output of the DSP. Around 0200 Brian had faded so much that he wasn't audible with the DSP out, but with it on CW and the NARROW position, I could hear him very clearly. It did indeed reduce the background noise. I don't think I could have found him if I hadn't already known where he was, but it extended the time I was able to hear him.

With 2 FOXes,
72,
Randy
WB5QMP ARCI   QRP-L   NORCAL   NWQRP ARS
Moscow, ID

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: wa5whn@juno.com (Jay D Miller)
Subject: [1026] Fox Hunt
Message-ID: <19961004.062316.4551.0.wa5whn@juno.com>

Hello Fellow QRP Compadres,

  OK, transceiver (Yaesu FT-757 GX II, Watt Meter indicating 4.0 watts) warmed up, double check freq. calibration with WWV, keyer paddles cleaned (Allright, who's the chocolate freak that, ... oops, that's me... ;-)). WHOA !!! A 589 signal, and he is signing QRP . Who could this be ? AA7FC, Glenn, in Buffalo, Wyoming, talking to John, W9FHA, up in Evansville, Ind.. The freq. is checked against my calibrated freq. counter (7.039 MHz). I call Glenn. He tells me that he is using a Wilderness Radio NC-40. WOW ! 589. Then we chat with John a bit. OK, who ordered the electrical storm (0143 UTC). I tell John that QSB & QRN are starting to take their toll here, but I am enjoying myself. John completely fades out, and the path changes. Not often (in the SW USA) You get to copy a 589 signal, from Buffalo, Wyo. to Albuquerque, NM on 40 cw, QRP both ways. But, just before the path fades, it peaks. Guess what had happened ? Did I get the Fox ? No. I was having too much fun chatting with Glenn & John, but that is a typical QRP contact. Anyone notice that we are one of the few groups, within the Hobby, while during a contest, will actually talk to each other ? So, I missed NE9K, but still had fun. Hey, maybe next time.

                                    With over 850+ Hot Balloons, airborne, this weekend,

                                                ...Jay, WA5WHN

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Phil Sikes" <psikes@whidbey.net>
Subject: [1023] Fox Hunting
Message-ID: <199610040814.BAA10126@islander.whidbey.net>

Hi guys and girls. It's been a while since I sent in a QRP poem, so here it comes. I work nights so I cna't take part in the fox hunts, but as you will read, my heart is there with you.

Twas the night of the Fox hunt
And all through the house
Not a creature was stirring
Cause I've got no spouse.

The paddles were ready
The coffee was hot
My Oak Hills was warmed up
And searching for the spot.

I hooked up my tuner
To the old flat top
The SWR was sky high
I thought "I'll be a flop".

I tuned and I twidled
All to no avail
It just wouldn't load
I need a magic spell.

I shorted the feed line
And fed it as such
And it tuned right down
To a one to one match.

I tapped on the paddles
and much to my surprise
They sent out a code
that brought tears to my eyes.

RF in abundance
Was all through my rig
The keyer was keying
Like a lightning struck pig!

With just one small touch
It was off on its own
Sending code to the ether
in a language unknown.

I unplugged the paddles
And said with a sigh
That's enough for one night
AR, SK and good night.

72, es hope you enjoyed. GUD luck to all in the hunt.

Phil
Amateur Radio Station
KJ7NS
ARCI 9196:NWQRP 412:QRP-L 528
email: psikes@whidbey.net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Brian Cieslak <bcieslak@merge.com>
Subject: [1040] FOX#2 report from AE9K
Message-ID: <199610041437.JAA28973@world.merge.com>

Wow!! was that hard! imagine trying to work a pile up thats about .001 db above the noise level. You folks with 559's we considerably easier to copy than those with less. Signals seemed to be the strongest between 02:00 to 02:30. The time wave DSP made the difference between being able to copy you just above the noise and not being able to hear you at all. But even the limits of the DSP filter broke down on some signals.

We had a couple of QSO's break out on the freq about the last half hour and I couldn't hold the frequency so I move up a KC or so near the end and my very last QSO was on the alternate freq 7.043 with KQ6AG.

Seems like we the west was favored again. All the 1's I worked were form CA. I hope I got everyone who tried.

October 4, 1996 - AE9K / FOX

NQ7K	559	AZ	Floyd	1:56
KK6MC	339	NM	Jim	2:01
WA7FCU	559	UT	Bob	2:03
N6ULU	559	CA	Stan	2:06
WB5QYT	559	NM	Tom	2:08
N6WG	339	CA	Bob	2:10
KU7Y	559	NV	Ron	2:11
KK7BD	339	AZ	Dan	2:19
AB5OU	559	NM	Tim	2:22
VE7CQK	329	BC	Paul	2:28
WB5QMP	339	ID	Randy	2:31
KI6S	339	CA	Doug	2:34
KC7NEV	429	AZ	Joe	2:40
AK1P	339	CA	Paul	2:43
AA7QY	449	AZ	Roger	2:49
KI7MN	339	AZ	Bob	2:53
NQ7K	559	AZ	Mike	2:54

WB4ZKA	339	AZ	Mike	3:05
AB6DG	559	CA	John	3:13
W6BAB	559	CA	Harvey	3:19
K1MG	559	CA	Mike	3:22
WA6NAE	229	CA	Dwight	3:27
KQ6AG	229	CA	Dennis	3:58

Congratulations to all you Fox Hunters. Good luck to the Foxes to come. You'll have your work cut out for you.

Brian AE9K QRP-L #58

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Ahrens Tim" <tahrens@devmail.sps.mot.com>
Subject: [1038] Fox, what Fox?
Message-ID: <9609048444.AA844448577@devmail.sps.mot.com>

Boo hoo... & it was sooooo easy on Wednesday night..
I thought, gee, what's the big deal? haha

Oh well, in the non-stop tuning the bands, I had a
couple of Qs, even got NH with the Argosy. (3w).

Got to try all the rigs...figured one of them might have had
Brian inside!! Guess it was the 40-9er, cuz I didn't
use that one!

Lots of 6s & 0s, but not much else.
Did hear Fxxx running a pile around 7034, guess the
vertical is working ok.

Good work guys!

Thanks,

Tim WA5VQK

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1122] FOX: Week Number 1 Results
Message-ID: <199610050353.DAA02826@chuck.dallas.sgi.com>

Foxhunt Current Standings Version 1.0 October 4, 1996

Gang,

Here I thought the 6's were disadvantaged. :-) Goes to
show what I know.

Not much to tell from the scores with only two samples and
both from the central USofA. Give it a month. Friday
nite finds 40m wide open with ZL's and VK's heard at reasonable
levels. Where is KL7? :-)

Note the additional counts in each section to make sure they
balance. The real test is going to be how often we confuse
NQ7K and NQ7X.

Enjoy.

Results as of October 4, 1996

Fox Scores

CALL	CONTACTS	STATE
AB5OU	37	NM
AE9K	23	WI

Totals 60

Hunters Scores

K1MG(2) AK1P(2)
WB5QMP(2) WB5QYT(2)
KQ6AG(2) W6BAB(2) AB6DG(2) KI6DS(2) KK6MC(2) WA6NAE(2) N6WG(2)
KK7BD(2) WA7FCU(2) KC7NEV(2) KU7Y(2) NQ7K(2) NQ7X(2)
--34 2xQSOs--

W0CH/m AA7OA KI0G AA0XI AA0XZ
AE4IC WB4ZKA
N5ET AB5OU KC5RAS KK5RO W5TFB AB5UA K5UP WA5VQK
KO6KA KI6SN N6ULU KD6ZMJ
KI7MN AA7QY AA7WT
W8DN

AE9K W9UQB

VE7CQK
--26 2xQSOs--

--60 total--
: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QSOs=1 STATES(w/c)=1/0 DX=0

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Kelly Ellison" <kelman@dialnet.net>
Subject: [1114] FS or HELP with HW-9
Message-ID: <199610050247.VAA14702@shell.dialnet.net>

Hello All,

I recently purchased a HW-9 that has turned out need some work. I either need sell it to someone
who can fix it, or Maybe I can someone to get the bugs out of it.
I Know what you're thinking.... this guy isn't a real ham, He can't even work on his own
equipment. You may be right, but because of responsibilities with my demanding job and 22 month old
son - It would take me 20 years to fix it.
Anyway, It might be a nice rig for the right person. It has a internal keyer and manuals.

I have 200 bucks in it, so please be kind and try not to take advantage of my situation.
Perhaps I am just stuck, but maybe there is a solution.

BTW, The problem is:

Ten and 30 meters are dead. And it needs to be aligned on the other bands.

Suggestions, Trades, offers?

Be gentle please...
Thank you,

Kelly Ellison
kelman@dialnet.net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Steve Hideg <Steve.Hideg.1@nd.edu>
Subject: [1088] FS: Broken HW-8
Message-ID: <v03007807ae7b1ed8ac02@[129.74.35.16]>

I have an apparently unmodified HW-8 that I recently purchased at a
hamfest. The seller assured me that it worked. (No, I didn't get his
name/call :(.

Well, it powers up, at least. I cannot get it to hear anything, nor does it
seem to be transmitting (at least not on the right frequency).

Unfortunately, I don't have the resources (time, manual, technical
expertise) to nurse it back to health. I took the case apart and inspected
the unit. It looked fine except for one yellow wire with one end hanging
loose. I couldn't identify the proper location for that end.

I would like to give this radio a good home, I'm sure the repairs would be
simple for someone who knows what they are doing.

Functional Condition: no Rx, apparently no Tx
  Physical Condition: no mods, case is fair to good condition
         Accessories: power cable
                      NO MANUAL

Make me an offer.

--Steve

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Tim Cook <timcook@erinet.com>
Subject: [1115] FS: Ten Tec AC-5 Tuner
Message-ID: <3255B462.159E@erinet.com>

I have a AC-5, for those who are not familiar with it , it is a small
antenna tuner made about the time of the PM series of QRP rigs. It will

match balanced lines or random wires. It has a 10 watt power limit. From the factory it did not have a cover on it, as you have to 'clip' the connections to the 28uh air core for matching it also has a dual section 350pf capacitor. I also have the paperwork that came with it. it is in very good condition, all original with the exception that one of the 4 clips has been replaced. Not sure what its worth, but will accept offers and/or trades on other qrp gear. I do know i havn't seen many of them around.
Thanks
Tim
NZ8J

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: wa5whn@juno.com (Jay D Miller)
Subject: [1044] FYBO & VFO Drift errors @ -1 degrees Celcius
Message-ID: <19961004.092444.10103.3.wa5whn@juno.com>

Joe (KC7NEV) & the Az. scQRPions,

  Can we get a rule change for the FYBO QRP AField, Feb. 22, 1997 event ? Those stations above 36 degrees north Latitude , can compute their multiplier using degrees F, those of us below 36 degrees north latitude, can use degrees Celcius, as a multiplier.   ;-) (Note : none of us will use zero degrees celcius as a multiplier)

  After putting the Yaesu FT-757 (all wrapped in plastic), the Wilderness Sierra & the GM-20 , in the freezer, to find out what the frequency drift errors were, after a period of time, in preparation for FYBO-QRP AField, Feb. 22, 1997 event. My Dog had put out a "No Vacancy" sign for the night. My Darling Wife (WB5LYJ) & My Dog were finally convinced that I had finally spent too much time in the desert. But, but Dear, I have not put the OHR Explorer II 20 meter xcvr, in the freezer yet. This experiment would never work in the UK, the Chaps always serve warm beer. But there again, they have real Ale too. So, as soon as My Wife & Dog allow me back into the House, I will have the data.   ;-) Has anyone else tried this ? Where they allowed back into the House ?

                                        72...Jay

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Phil Wheeler <pcw12@ix.netcom.com>
Subject: [1050] Gate 2 Status Info

Message-ID: <325538C6.3BAD@ix.netcom.com>

The following appeared today at KI4HN's vanity call page (you can get there via the ARRL home page).

Vanity Call Gate 2 Info Direct From The FCC

I received the following e-mail direct from a FCC employee. The employee asked me to keep their
identity confidential, so they would not be flooded with e-mail.

Hi Jim: I'm the FCC washington staffer up to my keister in the vanity call sign stuff now. I've got to tell you that in surfing the net, your page is far and away the most useful as far as the vanity call sign stuff is concerned. The "by date" pages are especially useful, and the "by call area" pages are a quick way for us to check overall activity. I guess you know we had 4500 mail and electronic apps on 9/23. They should be processed in a couple of weeks.

Get ready for a pig in the python when those 4500 get spun thru the computer at 3 am one morning!

Return to KI4HN's Home Page

Phil W7UOX

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Barry Keating <Barry.P.Keating.1@nd.edu>
Subject: [1096] HW-8 *** Tentatively SOLD ***
Message-ID: <v03007805ae7b30c1dbce@[129.74.87.62]>

I have just purchased an MFJ 9040 and so I have the following for sale:

HW-8:

includes Kanga Keyer built in (only visible on rear panel) - you can

still use straight key;

includes signal strength meter mod allowing SWR meter use;

includes 239 antenna connector on back panel;

case is in prime condition, only a few light scratches on top;

purchased from fellow QRPer (Jeff Grudin);

with photocopy of manual, Kanga manual, and "Hotwater Handbook."

It is tentatively sold!

Thanks,

Barry

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Barry Keating <Barry.P.Keating.1@nd.edu>
Subject: [1090] HW-8 For Sale
Message-ID: <v03007803ae7b29722406@[129.74.87.62]>

I have just purchased an MFJ 9040 and so I have the following for sale:

HW-8:

- includes Kanga Keyer built in (only visible on rear panel) - you can still use straight key;

- includes signal strength meter internal mod allowing SWR meter use;

- includes 239 antenna connector on back panel;

- case is in good condition, only a few light scratches on top;

- purchased from fellow QRPer (Jeff Grudin);

- with photocopy of manual, Kanga Keyer manual, and "Hotwater Handbook;"

- handbook includes description of the mods.

$100 plus shipping.

Barry Keating

WD4MSM

keating.1@nd.edu (fastest method of contact)

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [1104] HW-8 Manual Needed
Message-ID: <9610042314.AA09444@flowserver.stem.com>

Greetings folks...need the manual for the HW-8 including construction info. Will pay for the costs of xerox of course (and if you are in the sf bay area, I will even come pick it up, leave a pint of blood or various other precious thing as a deposit, and go copy it myself)...can anyone help?

Regardless, a good weekend to all...NorCal meeting this weekend!
73 de dave, n9uxu

=-=
David J Adams   N9UXU QRP-L #83
dave@flowserver.stem.com   NorCal QRP #1442
(415) 813-5028   Flow Cytometry Specialist

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996

From: lve1@inel.gov (Larry V East)
Subject: [1093] Impedance and Tuner Efficiency Measurements (Long)
Message-ID: <2.2.16.19961004212106.12e79988@eloi>

OK, here's my stab at measuring "tuner efficiency" using the method described recently by Bob Follett and others. However, I used an old Tektronix Model 191 Constant Output Signal Generator as the RF source in order to reduce as much as possible uncertainties due to change in RF output with slight impedance mismatches. The dummy load I used is encased in metal with a UHF connector at one end and rated at 15W; its the one that R.S. was selling for awhile but discontinued (guess they decided it was too useful...). Power was measured with an OHR WM-1 QRP Wattmeter. Interconnection between RF generator, Wattmeter and/or tuner was by 2 foot lengths of RG-58 with UHF connectors. The dummy load (DL) was connected directly to the tuner or WM-1 output connector. I used two ATU's for the measurements: a slightly modified Saint Louis Tuner (SLT) and an old MFJ-940. The SLT has the original toroid inductor, but I replaced the internal "bare wire" runs between the front and back panels with RG-174. The internal 50 dummy load resistors are mounted on a bracket connected to the bottom of the tuner box rather than on the PC board. The MFJ-940 is "standard MFJ" with an air wound inductor sandwiched between the top and bottom of the metal case.

I also used my Autek RF-1 to make some preliminary impedance measurements:

1. RF-1 >--RG-58-->DL

The RF-1 indicated a constant impedance of 50 to 51 Ohms from 1.7 to 35 MHz and an SWR of 1.0. (An interesting fact about the RF-1: the manual claims that "only the resistive component" is measured in the SWR mode.)

2. RF-1 >--RG-58-->WM-1 >DL

Impedance (Z) and SWR seen by the RF-1 as a function of frequency:

Freq. (Mhz)	Z	SWR
1.8	49.5	1.0
3.5	50	1.0
7.0	51	1.0
10.1	51	1.0
14.0	52	1.0
21.0	54	1.1
25.0	55	1.1

28.0	57	1.1
30.0	58	1.1
35.8	60	1.2

3. RF-1 >--RG-58-->SLC >DL

The "mode" switch on the tuner was set to either "Bypass" (connected to the external dummy load) or "DL" (connected to the internal 50 Ohm load). Impedance (Z) and SWR seen by the RF-1 as a function of frequency:

Freq. (Mhz)	Ext. DL Z	Ext. DL SWR	Int. DL Z	Int. DL SWR
1.85	48	1.6	48	1.5
3.70	52	1.3	51	1.3
7.10	54	1.3	53	1.3
10.10	57	1.3	55	1.3
14.15	61	1.4	60	1.4
21.20	67	1.4	60	1.4
24.90	72	1.5	73	1.5
28.50	74	1.5	77	1.6
30.00	75	1.5	77	1.6

4. RF-1 >--RG-58--> MFJ-940 >DL

The MFJ-940 was set to "Coax 2 Direct" and the DL connected to "Coax 2" output connector. This tuner does not have an internal DL.

Freq. (Mhz)	Z	SWR
1.90	51	1.0
3.50	51	1,0
7.0	53	1.0
10.1	57	1.2
14.0	62	1.3
21.0	68	1.4
25.0	70	1.5
28.0	68	1.5
30.0	65	1.6

Now for the "tuner efficiency measurements".

1. Saint Louis Tuner (SLC)

Config #1: TEK-191 >--RG-58--> WM-1 >--RG-58--> SLC >DL
Config #2: TEK-191 >--RG-58--> SLC >--RG-58--> WM-1 >DL

Ideally, one would use two Wattmeters, one on each side of the tuner. However, I only have one Wattmeter (an OHR WM-1) capable of making (more-or-less) reliable measurements below 1 Watt.

At each measurement frequency, the SLC was adjusted in Config #1 for zero reflected power indication on the WM-1 and the TEK-1 output level was set for a forward power reading of 50 mW on the WM-1. A change was then made to Config #2 -- without changing the TEK 191 output level or the tuner control settings -- and the WM-1 forward power reading noted. At 7MHz and below, it was necessary to "tweak" the SLC controls slightly for maximum output indication. At higher frequencies, maximum power output in Config #2 occurred at the same tuner settings as for zero reflected power in Config. #1. (All perfectly clear??)

Here are the results:

Freq. (Mhz)	Power Out (milliwatts) Config #1	Config #2
2.0	50	40
3.5	50	38
7.0	50	38
10.1	50	40
14.0	50	43
21.0	50	45
25.0	50	45
28.0	50	40
30.0	50	40

These results are rather inconsistent with results posted by others. I believe the difference can be attributed to the use of an RF source that is influenced less by the load impedance and the use of a shielded dummy load. These results look fairly reasonable to me.

2. MFJ-940

Config #1: TEK-191 >--RG-58--> WM-1 >--RG-58--> SLC >DL
Config #2: TEK-191 >--RG-58--> SLC >--RG-58--> WM-1 >DL

See above for measurement description. Maximum output in Config. #2 agreed with zero RFP setting in Config. #1 except at 3.5 MHz.

Freq. (Mhz)	Power Out (milliwatts) Config #1	Config #2
2.0	50	(couldn't get 1:1 SWR)
3.5	50	38
7.0	50	43
10.1	50	45
14.0	50	45
21.0	50	45
25.0	50	47
28.0	50	47
30.0	50	47

So, what does this all mean? Well, I'm not really sure. If you can believe the "efficiency" measurements, then it would appear that the MFJ-940 introduces somewhat less loss, particularly at 10M. But the differences are not really significant, and the apparent efficiencies are on the order of 75 to 85%. Note that an efficiency of 20% translates to a power loss of about 1 dB -- not all that bad.

We should (once again...) consider whether one might be ahead of the game by NOT using a tuner. Assume for the moment that your 40M antenna has a feedpoint impedance of 100 Ohms, representing an SWR of 2:1 if fed with 50 Ohm coax and driven by a 50 Ohm source (your rig). Assuming that your rig can stand the mismatch with NO LOSS of efficiency, you would gain a whopping (!) 1dB of output power by NOT using a tuner. However, it is quite likely that the efficiency of your PA will drop considerably when looking into a 2:1 mismatch -- but if you can "tweak" it up to full output, nothing is lost in terms or power output (your final may run a little warm, however...). In either case, you will HAVE THE SAME LOSS in the coax feeding the antenna. There is still a 2:1 mismatch between the antenna and feed line, independent of whether or not a tuner is used -- UNLESS the tuner is located AT THE ANTENNA FEEDPOINT.

It should also be noted that using a tuner can, in some cases, reduce "out of band interference" to a receiver produced by strong SW broadcast stations due to the tuner acting as a (rather broad) band-pass filter. However, a tuner should NOT be relied upon for reducing spurious emissions from your transmitter; that should be done with proper filtering within the transmitter.

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From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: WJ4PRandy@aol.com
Subject: [1051] JKC
Message-ID: <961004123048_202001139@emout15.mail.aol.com>

>From: nskousen@scientech.com (Niel Skousen)
>To: WJ4PRandy@aol.com

>Hi Randy,   I spent a couple of years over in Japan (Kobe-Osaka) in '75.
>Sounds fun to send Japanese code (as if I can even send regular
>code.....:-(Are there many out there who use the JKC ? (is it
>hiragana/katakana blended ?)

>Niel Skousen

I can send it even better with a loose toggle switch!!

I havent used a straight key enough lately to send anything
anyone can read. (And you thought I was happy to work those
guys cuz' I was running low power!) 8^D

73, Randy WJ4P

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Brent Alexenko <alexenko@prairie.nodak.edu>
Subject: [1043] KC2 Tweaking...
Message-ID: <Pine.OSF.3.91.961004100926.7086A-100000@prairie.nodak.edu>

Gentlemen....again I tap the pool of Knowledge.

Just put the finishing touches on my Sierra/KC2 and need to confirm
something. We've gotten everything together and connected the KEYLINE on
the KC2. We didn't hook up the DOT-DASH connection because we weren't
sure where it went. I think we've figured it out, but would like
confirmation just the same. I don't have my manual in front of me now,
and I don't remember where we decided, but any feedback would be appreciated.

Looking forward to chasing the fox myself....this will be my first and
only HF rig.

72,
Brent
KG0WE

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Doug Hendricks <ki6ds@telis.org>
Subject: [1017] KI6DS works Fox #2
Message-ID: <3254AA8F.BF0@telis.org>

I got home from work today about 5 o'clock and decided to try an experiment with an idea that I have for the SD-20 fishing pole that I made the St. Louis Vertical out of. What I wanted to try was an idea that I will call the NorCal Dipole, for want of a better name. Nothing original here, so don't get excited. I made a neat, light weight center insulator that will be in the Dec. issue of QRPp in Paul Harden's Hints and Kinks column, and fed it with a 50 foot piece of RG122 that I got from Joe Everhart who sells the Gusher II antenna kit. I cut two wires that were 35 feet long, connected them to the center insulator, and then hooked the insulator to the tip of the fishing pole. I attached the 50 foot piece of coax, and I then went up telescope or is it up periscope with the SouthBend SD-20 or St. Louis Vertical pole. In seconds the center of the inverted V was up 20 feet. I then took one wire over and temporarily tied it to my hedge, about 4 feet off the ground. The other end I tied to my camper shell on my pickup.

You get the picture? All of this in my front yard. Then, I use the MFJ259 antenna analyser to trim the antenna to resonance. I start at about 6.035 MHz. Trim off 18" per side, and I am at 6.840. Whew, better slow down, and do it inch by inch. It takes two or three cuts, and I am resonant at 7.035, which is close enough. I go into the house and get the Wilderness Sierra, battery, headphones and the Arizona Scorpion MiniMag Paddles designed by Floyd Smithberg, NQ7X. I listen at 0200, and there very faintly in the background is AE9K, Brian, the fox. I hear him work a New Mexico station, I think it is Duffy. Boy he is weak, but maybe just maybe I can work him with this antenna. Then my wife walks out the front door. She sees me sitting on the porch swing, Sierra on my lap, the portable antenna on the lawn, and says, "Thank God the girls are not home. They would die with embarrassment." She shakes her head, turns around and goes back into the house. I have a very understanding wife.

Back to the Fox, and hey he is getting stronger. I hear him work Randy Foltz in 7 land. So, I give him a call. KI6?? says the Fox. KI6DS KI6DS

Ur 339 339 and I have this huge smile on my face!! Two for Two!!! It doesn't get any better than this. By the way, I send 2 Watts for my power as I don't have a QRP-L number and don't want one. (I love QRP-L,

just hate numbers.) I work the Fox using a 2 Watt homebrew radio that I built, sitting on a porch swing, using an antenna that is a portable dipole cut for 7.035, fed with 50 feet of RG122 coax and only up 20 feet. Both stations are QRP, Wisconsin to California. Who would believe it. Then, all of a sudden I am deluged with mosquitos and I bail out in a hurry. But, I did hear Roger and Bob Hightower in AZ. Both of you had great signals. Very loud, 579 here and that is an honest 579 too! Great fun. Can't wait for next week. Thanks Brian for pulling me out of there. You are a fb operator. 72, Doug, KI6DS

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Marshall Emm <75230.1405@CompuServe.COM>
Subject: [1064] List numbers and Thursday Fox
Message-ID: <961004181954_75230.1405_HHB44-2@CompuServe.COM>

Hi, all--

40M was a mess last night here in the Denver Metro area, heard Brian may twice very faintly (as in 1/1/9) and no possibility of working him. Two other guys were listening too, and didn't hear him at all. Probably just about an hour later for us here against the Rockies.

Also, since someone asked me the question, if you have forgotten your QRP-L number, you can find it out by applying for another one. The server will say something along the lines of "hey, dummy, I already gave you number nnn!"

73
Marshall

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [1067] Looking for RTTYCW
Message-ID: <01BBB1F9.A3637D40@muenzlerk.uthscsa.edu>

Gang,
Many many years ago I purchased program for my TRS-80 Color Computer. Ok, stop laughing! It was about 1982 or so. It was called RTTYCW. Does anyone have any information about this program. What I need is the schematic for the computer to rig interface.

Thanks

Kevin, WB5RUE

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: kd0su@kktv.com
Subject: [1089] MiniMag Paddles (NQ7X)
Message-ID: <TCPSMTP.16.10.4.14.23.30.2240783031.2150839@kktv.com>

I have heard a few things about these paddles, but would like to know where to find the plans for how to build a set. Can anyone help me out?

Tnx & 73,
Rick KD0SU
CQC #100 -- MI QRP # 1270 -- ARS #64

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: w0ch@juno.com
Subject: [1084] Mobile Foxhunting Trials & Tribulations
Message-ID: <19961004.140802.4895.0.W0CH@juno.com>

Hello gang:

Just a note about hunting the elusive Fox. Seems like I can't do anything the easy way, so here I am trying to snare the Fox from my mobile.

Wednesday night, I was driving through southern Minnesota when Tim's turn came up. Pulled off the interstate five minutes before the start time, found a quiet location and got ready. The start time came and all I hear was the pile-up. No signal from the Fox. Nuts!!!!!   Well, back onto the interstate and headed north, listening all the way.

About 0230Z, found my motel at Faribault, Minnesota. Went in and checked in.
Back to the car for my bags I checked the frequency again. There he was, just barely above the noise. Switched on the Radio Shack DSP, fine tweaked the tuning. Tim signs, I call once. Bang, he comes right back. We exchange 559's and it's in the log!
Boy, he does have good Fox ears. Thanks Tim.

Thursday, Brian's turn as Fox. Here I am in Minneapolis. During lunch

hour, I drive around scoping out possible places to Foxhunt at the appointed time. Listened to the AM broadcast radio tuned a Madison, Wisconsin station searching for a "hot-spot" without much line noise. Find a likely prospect in a large building materials store parking lot without any close electrical lines.

Thursday night, 15 minutes before the Fox sticks his head up, I hop in the car and scoot over to the parking lot. Whoa.....what's all the noise on 40! It seems that I over looked the mercury vapor light poles in the parking lot. The lights were't on during my lunch hour site inspection. Now they were spewing forth 20 dB over S-9 worth of garbage across the entire electromagnetic spectrum.

Back to the hotel parking lot. Found a spot away from the mainstream of traffic and set up shop. The time comes, but no Fox. I can hear west coast stations working him. Floyd in Arizona was positively loud! Still no Fox. I sit and listen. And listen.
And listen. About one and half hours later, I caught just the briefest snippet of RF being reflected down from somewhere (I know it wasn't the ionosphere). Then silence. Rats. I'm skunked for the night! Guess I was too close to Wisconsin. I thought about parking in Brian's driveway but probably I should have been in California based on the signals I heard. The skip sure sounded loooong last night.

Lessons learned:

1. Mobile Foxhunting ain't easy.

2. Look for parking places without light poles.

3. Mobile Foxhunting ain't easy.

Anyway, you all get your turn later. I get to be the Fox a couple of times later in the season (when it's REAL COLD outside). No telling where I'll be hiding.....

Good hunting,

Dave W0CH Foxes: 1 Me: 1

PS: Brad KB0ROL, I'll be aiming my sights at you Tuesday night. Be sure to turn your RF gain way up!

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Basil Arrick" <basil@mail.airmail.net>
Subject: [1078] Modifying 40-9er for other bands
Message-ID: <m0v9GA5-000EzdC@mail.airmail.net>

 Can the 40-9er be easily modified for other bands? I saw one person
who was working on a 30-9er. Could there also be 160-9ers, 17-9ers,
and 10-9ers? What about a 6-9er (stop laughing! ;-))?

 What parts need tweaking/replacing on the 40-9er to do such a thing?
It would be great to have a 40-9er, 30-9er, and a 17- or 20-9er. A
little stack of Altoids boxes. :-)

Basil, KB5KHR
basil@turn.com

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: mlynch@skyenet.net (martin lynch)
Subject: [1111] Morse Code Software for Macintosh Computer
Message-ID: <199610050233.VAA16953@skye2.skyenet.net>

I have a friend who wants to learn the Morse code using his computer.
However, I have been unable to locate any software that will run on a
Macintosh computer. Does anyone know where I can obtain software he can use?
Thanks in advance for your help.

==========
Marty Lynch Amateur Radio Call: KA1LXG/9
Elkhart, Indiana
QRP-L #474   NorCal 1762
e-mail: mlynch@skyenet.net
==========

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [1098] N.E. ARRL CONVENTION @ BOXBORO MA.

Message-ID: <199610042213.SAA85086@nss2.CC.Lehigh.EDU>

Hello Gang,

Just a short note to invite you all to the N.E.QRP club booth at the
N.E. convention in Boxboro Ma. I will be manning the booth on saturday.

And Jim Fitton has promised me that someone would show up to relieve me,
so I could see some of the show.

Hope to see you there.

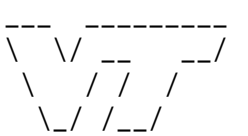
73 de AA1IK
Ernie

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: pelt@vt.edu (Randy Pelt)
Subject: [1075] Negative Voltage
Message-ID: <v01540b06ae7adddd7641@[198.82.152.40]>

I need -12v to diode switch my i.f. filters in a rig I'm building. Does
anybody have a schematic of a curcuit that will come up with -12V off a
+12V DC line. I could do it off the ac power supply, but I only want to
get into my ps as a last resort. Suggestions appreciated.

Tnx in advance

Ranson J. Pelt
pelt@vt.edu
QST de w4wyt   Semper Fi
    ex-nz4i



From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [1081] New to List, Intro

Message-ID: <1.5.4.16.19961004145104.18c7b068@destin.nfds.net>

Boy, am I glad I found this list!

Imagine, spending all my time on the radio and money on books when I could have been on this list and spent the money on new rigs.....

My name is Bill Myers, callsign KK4KF. I live in Shalimar, Fl (EM60). Shalimar is located in the northwest Florida panhandle near Ft. Walton Beach, about halfway between Pensacola and Panama City.

I have been a ham since 1986 but have not been active all that time (divorce, moved, blew up rig, remarried, the usual stuff). But I'm back up on the air and having fun. Though I occasionally work "voice" I spend most of my time in the 40 meter novice band. And, my code speed isn't where I want it to be, but I figure any code speed is better than none.

I am currently using an Icom 735, QRO and QRP. I also own a Heathkit HW-16 and an HW-7. Both rigs were given to me, the HW-16 is in mint condition but the HW-7 has been rode hard and put up wet more than once. Right now the receive sensitivity is "dead" and there is no transmit on 20 or 15. Hopefully I'll have the HW-7 up on the air before too much longer. I also plan to buy/build a new QRP rig on the not-to-distant future. I'll be checking all the web pages and articles out. I'm looking for something I can pack up and take anywhere but it doesn't have to be real tiny.

Thanks for the GREAT list and 73's to ALL...

Bill Myers KK4KF ARRL FISTS#2390 QRP-L#755
snail mail P. O. Box 178
Shalimar, FL 32579
e-mail bmyers@destin.nfds.net
home page www.nfds.net/~bmyers

CHECK OUT THE U. S. FISTS HOME PAGE http://n9nvv.qrp.com/~fists/

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: [1029] NN1G apology
Message-ID: <01IA8KIW72B68WZDT2@tntech.edu>

All,

I sent this before everyone rightfully pointed out my sins.. not sure.. but didn't see it in the archives (I read the group from

the posted archives.. not direct)

I apologize.. my mamma once told me if I didn't have anything nice to say.. should keep my mouth shut.

I did get my kits from the source Dave Benson mentioned.

I really think designers like Dave should get praise. I guess my real intention was not to slam anything he has done, he has done so much to promote QRP, that I would be doing something against my true beliefs if I did so.

you can all throw stones at me.

I do want to say, however that for a FIRST time kit builder I would recommend the Widnerness Norcal.. this in no way puts down any other kit.

72
Jeff, AC4HF

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1041] NN1G Report [long]
Message-ID: <199610041500.PAA28150@chuck.dallas.sgi.com>

Gang,

I won't go through the list of NN1G rigs that I own. Just let it go at more than 6 or so. :-)

There are different philosophies on everything in life and building is no different.

Some people want to do everything from the ground up. Design the entire rig, etch the boards, gather up all the parts from a billion places, and go to town having a good ole time building the rig(s). The big authors in the field will tell you this is where it's at. They are right. But we need everyone that we can get doing QRP and not everyone has the time or the energy to do this. If you really want to know what is going on this is the way to go. A lot of the

'closet QRPers' on this list do this and never say a word. I'm sure it is their timid nature and fear that we are not interested. Not so guys. Some day I want to lay out and complete a large PC board from scratch just to say I've done it. Write it up for Doug or QQ.

Some people want to buy the boards, save every nickel and dime they can on getting the parts together and go to town having a good ole time.

Some people want to buy the board and parts from one place, get the rest from their local dealer(s) and or Radio Shack (I think I read in the last year in the Dallas Morning News that more than 85% of the American population lives within five miles of a R/S) and then have a good time putting everything together.

Some people want to buy everything from one vendor or manufacturer and put it all together.

And several more themes and variations we can all think of.

It just depends upon a lot of factors and where one is in experience levels, finding good deals, etc. as to which path you or I take to get to the end result.

Sometimes we are successful and sometimes we struggle and sometimes we invest a great deal of time and energy and wind up with a mess. Been there. Done that. Any number of factors enter into the final equation. I have had two kits that never worked. One someone else had started and I lost interest and never did feel that the investment of time was worth it. This was the RadioKit. The other was a first run of a version of a Direct Conversion rig. Too many mods to add and it still wasn't right.

I'll just relate my experiences on the NN1G line of rigs. My first was the NN1G Mark I which first appeared in the QRP ARCI Quarterly. Dave and FAR Circuits had the boards and docs. This was in Jan 1993.

A year later Dave had an improved version called the Mark II. Danny Stevig had a kit at the time and I decided that after almost a year I was taking too long to get everything together to build the Mark I. :-) So I ordered the 20m version. This same rig I used to take first place in the 20m single-band class of one of the QRP ARCI QSO Parties.

Since then I have built the NE4040, NE4080, the SWL-40, SWL-80, SWL-30, and the GM20, GM30, and GM40 in one or two versions of each. All the rigs above worked as advertised and I certainly got my money's worth outta building them and using them on the air.

The discussion periodically comes up as to what rig should anyone build. It depends upon a great number of factors. Budget range helps to narrow

down the choices from the many kit manufacturers, many people will stand in line to help you, others experiences and what you hear from them, ...

I would guess there outta be a 20 question quiz before one starts out.

My own personal recommendation is to sit down and plan everything, then ask if the game plan is a good one. From the feedback that you get from others plus what you get from your research then make a decision. If you make the right one then you'll be happy. If you don't, then you learned something from the experience. Read read read everything you can get your hands on. Try to determine the difficulty level you want to tackle and go for it. This list has more experience gathered in one place than any other on the face of this planet. Just ask and ye shall receive. Just have enough disk space to save all the responses. We all like to Elmer. Get a second and third opinion on everything.

Three weeks ago in the mad rush to MD and back and then back to MD, I had ordered the new NN1G Mark III from Dan's Small Parts. This one for 80m. Wonder why? :-) I wanted to build another and wanted to take Dave Benson's suggestion on putting the boards back to back to take up a small space.

Kit arrived and I took it to MD and built it in the hotel room at night when the noise level was so high that I could not operate.

Now this kit is not for anyone but the experienced builder. No instructions other than the 1995 ARRL Handbook schematics and Dave's writeup for that. The schematic has a few errors, but ARRL caught most and there is an errata sheet. The two 1.8"x4" boards are done by FAR Circuits. Single sided silk screened not solder masked. There are some printing errors on the boards. You just have to be careful.

After careful assembly and putting it into a TenTec case, the TP-41 which is 2.25"x5.50"x4.50", and doing what I thought was a real neat job of installation, my educational process then began. Oh and I just found out what TenTec was an abbreviation for just by going to their home page. I know that I had not seen it in print anywhere else in all of the reading that I have done over the years.

Receiver fired up on first application of the battery voltage but after a few minutes the audio level would die off almost exponentially. Oh oh, outta the case and onto the desk. Now I worked on this off and on over the past two weeks. I'm too stubborn to ask for help but finally sent email to Dave, NN1G, and talked to Danny on the phone to see if they had heard of the conditions described. Nope. Recommendations made above what I had already tried and failed on. Still no go. Well last night I am proud to say that I finally found the problem. I had diagnosed the problem before in a logical progression down the receiver signal path and had it narrowed

to the FET switch and the 386. I swapped parts and still no go. All this was done as someone without test equipment would have done. When I build and diagnose I like to think like someone else who is doing this for the first time. It helps me to see where others are going to have potential problems and to compare with other kits. I could do this faster but that is not the exercise for me. I read at high speeds and a long time ago I was in a small book store in Lewisville TX run by a PhD in History. I noticed that he took 15 minutes to read a page and I asked him about it. He said that reading to him was like eating a fine meal. He liked to enjoy every word. I respect that. So we sometimes post the time to complete a kit on this list and others do the same. It is not really a race and we don't mean to imply that and I'm sure that none of us do that intentionally. It is just to give you some idea of how much time and energy (on the average) you might wind up spending on a specific kit. Remember how Heathkit used to say 'two evenings' or 'one evening' to complete?? That was useful information. Did not include debugging time. Mileage may vary. :-)

Now here is why for advanced projects you need a good scope, frequency counter, DMM, and everything else you can think of. But I understand the budget constraints of many and you have to really decide to get serious about tinkering to invest the money in high dollar test equipment. You should do like I did and most of us do and that is to very carefully accumulate the stuff over a long period of time. You can find some good bargains at swap meets, etc. What with the decline in some people's interest in building and their getting out of the business or just moving up to new equipment. But you have to start somewhere and most will first build a kit using simple tools and a DMM and then decide if they want to invest more time and money. Some clubs have a pool of equipment but that requires capital investment and hope that everyone knows how to use it without damaging same.

I started out again tracing the signal from the Tektronix signal generator (the best $75 that I spent in the last two years) through the receiver with the Philips PM-3266 scope. The signal was good even through the FET switch, Q2 if you are following in the 1995 handbook. This was previously where I thought the problem was. I had discovered through the previous evenings that while listening on the headphones the signal seemed to be frequency dependent. That if I swept the frequency the audio would come back after the audio had locked up and had gone away. Very strange.

Well on the scope I found that the signal was still passing through the FET and into the 386. Changed the 386 and still same behavior. If I touched the Drain of the FET, the audio would come back due to AC hum. During this testing procedure I learned that you can plug a 386 in backwards and still have it work even after it got rather warm to the touch. :-)

The final analysis will surprise everyone. It was not the rig!!!!

It was the headphones I was using. Don't know why, don't understand, and this one will take years to think about. I was using Sony earphones and they were acting funny. The headphones were not my usual set in daily use so they went into the round circular file system.

It was worth the time spent. I moved the audio out from the point between the resistor and cap to ground back to pin 5 where Dave had it in the Mark II. Audio was definitely up. I'd recommend the mod.

Now I have a NN1G Mark III rig up and running. I put it all back nice and snug into it's new home. I'll take it to NYC for show-and-tell and to Pacificon.

So there are people who will go after the Dan's Small Parts version for $63.95 and then go after the case and associated connectors. This is old technology, but it still works and it works well. Rick Littlefield's design and derivatives have been around and will continue to survive into the next century. Dan's kit was complete on all the on board parts and it even has the RIT parts but no board. I didn't even put the RIT in.

If you want the latest technology and reduced drift, better instructions, etc. then I'd recommend the new GM-XX series direct from Dave for only $72. The reasons are simple: Dave gets revenue for his work and it is a better layout, better instructions and much much reduced drift. I can even give you step by step instructions (they are at the ftp site). My $0.02 worth of experience IMHO. This is not a put down on Dan's kit as he alone as sold over 800 or so over the last three years. Dave did not receive any revenue for this but he did/does get the recognition. When you say 'NN1G rig here OM' then most people know exactly what you are using. I know that Dave has probably spent thousands of hours answering all kinds of inquiries about his rigs that he had nothing to do with. That is dedication gang. My hat's off to you.

If you remember just after the QRP to the Field contest last month Dave Benson, NN1G, posted his results. In fact I sent him email kidding him about his posting in that he did not have a clock with him. Hey I said, if he had had the Mark II with the 10MHz IF he wouldn't have had any problem knowing what time it was. :-) ;-) Actually WWV isn't all that loud but if you know what to listen for you will hear it. You don't have to wonder what the solar flux is or the time. :-) ;-) It really is at the noise level in the reciever when in the case. Dave was good natured about this and that is something that I like.

The SWL series from Dave for 80m and 40m are great and especially if you go for the $80 or so and get the case with them. One of the reasons I carry the SWL40 around on trips is the small size. I use the SWL80 on EMPS. And I like the SWL40 also and the GM40 and the OHR Exp I, II, and OHR100 and NorCal 40a ...... For 30m go with the GM30 or OHR100. It is worth

the extra money to get the hot receivers. Trust me here gang I've been there. Now some will note that I don't list everyone, like Wilderness and S&S and that is because I haven't gotten that much air time yet. Hopefully this winter and by December. Stay tuned. I am not trying to leave anyone out of the picture so don't write anything extra into the equation.

I have had discussions with Bruce Williams, WA6IVC, at MXM Enterprises on just which is more important the antenna or the receiver. I say the antenna first. This is because you are running low power and you just gotta have an efficient radiating system. Bruce says you gotta have the receiver to hear the other guys. As someone just posted the other guy is doing a bunch of work too and a lot of the times I'm in QSO with a QRO station. It is a close race here and you really really need both. I have worked other QRP stations where I know we both had good receivers as we were both fighting terrible conditions but managed a QSO anyway. Just look at the reports and the postings on the foxhunt. You can see that as QRPers we have our work cut out for us from the start.

Again, Dave Benson, NN1G, and the handfull of designers and kit manufacturers are doing a great service for all of us. They are valuable and we need to support each and everyone as much as possible. They want feedback and they want to help. Their income and their reputations are important and they will do all that they can to meet us halfway. You gotta do your homework and do your best. They are not there to do it for you. That's why it is called a kit. You have to do your part too. And that is one thing that is difficult in this day and age. We have all levels of expertise and it requires an expensive range of kits to meet the requirements of the audience around. Lots of work and lots of investment to keep going and keep us all coming back for more.

I'll have a photo at Pacificon to show during my talk. It will be all the rigs stacked at one time and in one place. :-) I get the question all the time as to which is my favorite. I can truthfully say that I don't have just one that I use all the time. They are all fun to use. I am rather simple in my needs. Good receiver and QSK and clean signal. I don't use RIT and I don't need AGC. I am trying to get time to get the 81dB attenuator built to see how the receivers compare. On 30m I would rank the GM30, OHR100, and OHR Explorer II about equal on sensitivity. They are all good. I haven't played with the Sierra that much since the 50KHz on the dial is very narrow and I like small tuning ranges over a large dial. Just my preference.

I apologize for the length, but hopefully it is useful information for some. Get's me back to what I love most. Not writing this stuff up but doing it.

FYI de K5FO - 0 for 2 on the foxes. Was there but didn't do it. Stuck on the

EMPS count too, but I'm down there. Winter is coming winter is coming....

: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QSOs=1 STATES(w/c)=1/0 DX=0

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "John Shuster" <jshuster@ix.netcom.com>
Subject: [1045] OHR Group Buy is ON !!!
Message-ID: <199610041525.IAA15988@dfw-ix7.ix.netcom.com>

 * * * * * * * * * * * * * * * * * * *
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OHR 100 Single band, 5 watts, in 15/17/20/30/40 meters - $149.00

DD-1 - Six digit, 50 MHz, frequency counter/digital dial.
Cabinet included! - $69.00

WM-2 QRP WATTMETER- $89.00

SCF-1A Audio Filter Kit - $59.00
Note: Dick has made some improvements to the SCAF
and will be shipping the new kit in 4 - 5 weeks.

KEYKIT (keyer board and parts only) - $34.00

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$5.50 for USA; $10.75 insured shipment for Canada.
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   on a daily basis. Include your CALLSIGN and your choice
   of BAND, if applicable. If ordering for friends, include
   their callsigns too so that they can call OHR direct and
   arrange for payment and shipping instructions on their own.

2. Contact OHR to arrange payment and shipping. Use your CALLSIGN.
   OHR accepts Visa, MC, money orders, and checks.

   Oak Hills Research
   20879 Madison St.
   Big Rapids, MI 49307

   Phone: 616/796-0920
   Fax: 616/796-6633
   Email: ohrqrp@netonecom.net

I will confirm your (and your friends') callsign and order directly
to you by email.

* * * Final Notes for Newcomers to QRP-L * * *

For those new to the list, OHR kits are known for their ease of assembly, quality components, and excellent design. For example, the OHR 400 has three boards and uses a diode ring mixer for transmit and receive instead of
NE602's. This translates into higher performance on both receive and transmit.
You get more for your money.

Customer support is superlative, and Dick invests his profits back into improved
designs and new kits for us. The improved SCAF filter is the latest example of
OHR's commitment to making good kits better. I'm going to get one on this group buy and save! OHR kits have always received positive magazine reviews
from seasoned builders. Some of these reviews are available from our QRP-L

homepage.

Live to build, build to live,

John Shuster   KC7CKP for a while longer
QRP-L Group Buy Coordinator
phone/fax: 360/876-1603
email: jshuster@ix.netcom.com

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Jeffrey M. Poulin" <jpoulin@erols.com>
Subject: [1116] old CQ magazine
Message-ID: <199610050043.UAA07004@smtp2.erols.com>

Does anyone have a copy of the April 1992 CQ magazine. There is supposed to be an article on building a portable antenna useful for QRP receivers. I was told it is on pages 38-41. If you have it please let me know. I will of course be glad to pay for copying and mailing.

Thanks

Jeff/KF4JSV QRP-L #743

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
Subject: [1059] Oscilloscopes
Message-ID: <Pine.OSF.3.95.961004111212.24379B-100000@duke.usask.ca>

I know this is not strictly QRP but I am looking to buy an inexpensive
oscilloscope and would like some advice. I am hoping to work on building
radios for 160m to 10m. A friend of mine has a Heathkit for sale at a
good price. I don't know if Heathkit put out more than one oscilloscope
but this one looks to be vintage late '70s. Does anyone have experience
with these oscilloscopes? Also, are there things I should stay away from
etc.? Thanks in advance for your help.

Brian.

+--+
| Brian Buydens, Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca |
| VE5RDV |
+--+
| "If I had only known, I would have been a locksmith." |
| -- Albert Einstein |
+--+

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Jim Hunter <jhunter@sunrise.alpinet.net>
Subject: [1092] power line noise
Message-ID: <Pine.SOL.3.91.961004151848.24322C-100000@sunrise.alpinet.net>

I have a tremendously high noise level during the day
--- it quiets down some at night --- I have high
power lines running very close to my ant.

Is there any filter I can buy that can help this???
Any suggestions???????

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: svecbrdk@well.com (L.Svec,W.Burdick)
Subject: [1021] Putting the 40-9er on 80 meters

Message-ID: <199610040807.BAA10240@mh1.well.com>

>Hi, Wayne. Would you please tell me what components
>to change for using the 49er on 80 meters? .... I have
>gotten replies to my questions on this mod that essentially
>say to double the values on the freq sensitive stuff...

Jim,

Actually, that advice is correct! I'll give you an example of how this works. Suppose you have a 100pF capacitor and a 5uH inductor. If you plug these into the resonant frequency formula,

$$f = 1/(2 * pi * sqr(LC))$$

you get about 7.122MHz. Now double the values to 200pF and 10uH. Plugging these in you come up with 3.561MHz, exactly half the frequency.

Of course there are some subtleties:

(1) You may be able to tweak the low-pass filter components on 80m slightly away from 2 times the 40m values to position the "knee" in the low-pass response at a particular spot in the 80m band. But this isn't a critical issue on the 40-9er; just round off to the nearest standard component value. (On the other hand, if you're a perfectionist with accurate test equipment, tweak away!)

(2) Since the trimmer capacitor in the receiver input circuit is only 50pF--a small fraction of the total capacitance needed at 80m--you might be better off increasing the inductance in that part of the circuit by FOUR times and leaving the capacitors the same size. The L*C product will still be twice what it was on 40m, thus resonant at 3.5MHz or so, but you'll be able to adjust the receiver input more easily. It will also have negligible impact on performance.

I haven't tried this myself, so if you do try it and it works, please post the values you used to QRP-L. The 40-9er, like all NorCal projects, is intended to promote learning and interaction among QRPers.

73,
Wayne
N6KR

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Dave.Ackrill@westwood45.powergen.co.uk
Subject: [1025] QRP For Europe Report
Message-ID: <961004095754Z*/G=Dave/S=Ackrill/O=westwood45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB/@MHS>

Hi All,

Well, I did manage to do a little QRP operating over the weekend of the Europe For QRP activity period. However, my results were a little disappointing. I seemed to work either stations from other countries who were running QRO, which didn't count, or English stations running QRP, who again didn't count towards my score!

The total number of scoring contacts was 4, all of which were in Europe, and since I'm in Europe as well, they were worth one point each!

Did anyone else have a go over the weekend? If so how did you get on?
 Better than me I hope HI :-)

Oh, by the way, I've started to get letters asking me to send money to a list of people, I wonder why ? ;-|
Most on the list tie up with names listed in the callbook, but strangely enough the addresses are all different! I do hope that these letters have nothing to do with my membership of this list....
Needless to say, they have gone in the bin unanswered.

De Dave (G0DJA)

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Steve Slavsky <sslavsky@CapAccess.org>
Subject: [1074] Receiver Filters
Message-ID: <Pine.SUN.3.91-FP.961004151808.20880A-100000@cap1.capaccess.org>

I have a question concerning the proper way to approach filtering on my receiver. I have a Yaesu FT-840 transceiver which currently has the basic 2.4Khz SSB filter. Now that I'm spending a lot more time on QRP CW, this is obviously kind of wide. Even with the notch filter, RIT and

fairly sensitive ears, I'm having trouble separating weak signals, especially on 80 and 40 meters. Before I get a SCAF, DSP or some other external filter, should my first step be to get the 500hz internal filter? From what I've read on the list, this would be the right move, but I want to make sure. I also don't quite understand, if I do get the internal filter, how does an external audio filter help unless it goes below 500hz? Or should I skip the internal and go directly to the external one??

I can't afford the higher priced DSPs, so they are not really an option. The RS one is a cheap solution, as is the OHR SCAF, but I have a feeling neither will be sufficient without the internal filter.

This may not be of interest to others on the list, so direct replies are appreciated.

Thanks & 72/73,

Steve, N4EUK
Reston, VA
EMPS - QSOs=1, S=1, Conf=1 N/T+=1 (Almost hate to mess up a perfect record by working any more :-).

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Bob Hirsch <bobh@p3.net>
Subject: [1037] Reflections
Message-ID: <1.5.4.32.19961004141107.00677c2c@p3.net>

Guys ;

I've already had 5 responses to my post about Reflections by Maxwell and I think the store I found them in only had three copies! I answered all 5 requests for information and explained the situation to the last 3.

I thought there was only one person looking and I don't even know if he was one of the five. Sorry if anybody is disappointed by the shortfall and I'll look around some more to see if anybody else has any copies.

How 'bout it Craig up in New Hampshire, any ideas on where to snag some copies of this book?

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: lhalliday@creo.bc.ca (laura halliday)
Subject: [1099] Re[2]: FREE VCR PARTS
Message-ID: <199610042224.PAA04785@BC.net>

Steve KD1JV wrote:

> Older VCR's are a great source of parts, newer ones have lots of
> SMT resistors and caps...
> (snip)

All VCRs are useful for parts. I have a box of junk cellphones and things that I'm stripping for parts - do you know what it costs to buy onesies and twosies of chip resistors and capacitors?

Quite by accident I happened across a nifty way of removing these little gems. Use two soldering irons like tongs - you can heat both ends of the resistor or capacitor simultaneously, and then lift the part off the board. Even wave soldered boards only require a small tug to free the components; age and heat soften the glue holding the parts on. I've successfully removed 1206 and 0805 size components this way and haven't fried one yet.

> ...Don't forget about the TV sets either, the video out driver
> transistors (three of them are on the card the pic tube plugs
> into) have a high ft and work good in QRP xmitters.

This is an excellent excuse for building (and using :-) a transistor tester - like the one in Solid State Design. Modern DMMs will tell you the pinouts, type and DC beta of transistors. The original location of the transistor will tell you things too - like whether it came off a control board, an IF or video board, or out of a UHF tuner.

Please allow me to second the concerns about voltage, and about that picture tube: when those things break, the results are nasty. Remove the electronics - carefully - and ditch the rest promptly!

Remember my messages about Huff and Puff? Well, my prototype is operational. Sort of. I built mine with a simplified integrator that sort of works, except that the integrator discharges through various leakage paths faster than the digital mixer can charge it. So I tried replacing the integrator's 2.2 uF capacitor with a 10 uF tantalum capacitor, which causes the integrator to slew downward a volt every couple of seconds when left to itself. The digital stuff can now keep

up, the loop locks, and the drift is beyond my ability to measure it. However, with the integrator slew rate being so slow, the lock is somewhat tenuous - it tracks the VFO only so far, and then loses lock. So I'm going to build the more elaborate op amp integrator (i.e PA0KSB's original integrator) and see how that works. While I have a couple of LT1055s in my junkbox, I'll probably opt for a TL081 or something like that - usefully low noise, and single supply operation. Cheaper than the LT1055, too.

Before anybody asks - Huff and Puff references include QEX for February 1996, the RSGB Radio Communication Handbook, and Radio Communication (RSGB) for July, August and September 1996.

Laura Halliday VE7LDH
lhalliday@creo.bc.ca
ve7ldh@amsat.org
Locator: CN89mg

"C'est une femme mutine, assez elegante, grave et legere, ayant le sens du confort et du plaisir en tout." - C. Deneuve

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dan Tayloe-P26412" <Dan_Tayloe-P26412@email.mot.com>
Subject: [1053] Re[2]: Homebrew VFO and Drift
Message-ID: <M27283920.003.rfcs2.1.961004163405Z.CC-MAIL*/OU=SATCG/OU=AZBH/PRMD=MOT/ADMD=MOT/C=US/@MHS>

> Oh well.... Yes, I am using the diode trick for temperature compensation also. I also have an assortment N type capacitors for temperature compensation. It just appears that when different components are pulling strongly in different directions, it is very difficult to achieve a satisfactory balance.
>
> Like I said, I will have to rethink how I want to proceed on this 30m rig.
>
> On the other hand.....
>
> I was working on my 20m version last night. I have a 1.85-2.0 MHz VFO mixed with 12 MHz to produce 10.0 to 10.150 MHz injection for use with a 4 MHz IF for the 20m receiver.
>
> The VFO uses an air variable, my second (and last!) ceramic coil form for the inductor, and NPO caps. I got *10 Hz* drift worst case power on to steady state!

I make all my boxes out of double sided PC board. I have found that heavy duty paper cutter works very well cutting double sided PC board. This works great for custom sized QRP rigs.

The use of an air variable greatly increases the size of the rig. It turns a 4" wide cabinate into a 6" one. Likewise, I need to make the rig taller (2.2" vs. 1.5") to allow clearance for the capacitor when unmeshed.

Size wise, my 30m 1.5" H x 4" W x 3" Depth xcvr looks really cute! Never-the-less, I am beginning to think that the increase in rig size is well worth the extra stability.

- Dan Tayloe, KK7BD, Phoenix, AZ QRP-l # 696

_____ Reply Separator _____
Subject: Re: Homebrew VFO and Drift
Author: kd1jv@juno.com@INTERNET at #EMAIL
From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [1069] Scanvenging old TVs (was Re: NN1G Report [long])
Message-ID: <Roam.3.0.844454831.11359.myers@bigboy>

> On Fri, 4 Oct 1996, chuck adams wrote:
> > gather up all the parts from a billion places,
>
> A TV set will contain almost all the components one needs.

It is probably worth pointing out to the list that a TV set, even after it has been turned off for a while, can contain some lethal charges. Be particularly careful around the picture tube and flyback circuitry. If a TV set has been turned off for several days or longer, the chance of encountering these charges is pretty small, but always practice caution.

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: QLF%mimi@magic.itg.ti.com
Subject: [1028] SIERRA SIDETONE
Message-ID: <9610041233.AA18546@itg.ti.com>

From: Brad Bradfield QLF

Subj: SIERRA SIDETONE

Good morning QRPer's,

I sent out a message earlier in the week looking for information on the proper C41 capacitor value (or how to calculate it) to shift the sidetone in my Wilderness Sierra up to about 700-725 Hz from it's original 600 Hz or so. After receiving no responses, I later found out that my incoming mail server went belly up for a couple days and puked up all the messages that it received without delivering them. On the possibility that someone e-mailed me direct with information on this subject, please send it again as I did not get it. I did receive notes from WK8S and KD0FX looking for the same information.

Y'all have a great weekend.

72's es 73's,

Brad, WB0CGH

****
Brad Bradfield, PE Electrical Design Engineer
(H) 817-321-2960 Texas Instruments, Inc.
(W) 214-462-6230
Real men talk with their fingers!
QLF@MSG.TI.COM
WB0CGH@WO5H.#DFW.TX.USA.NA
ARRL Life Member QRP-L #377 SMIRK #4906 IEEE(M) ARS #72
Collector of wireless and landline Morse keys and accessories.
****

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Gary R. Hanson" <ghanson@uts.cc.utexas.edu>
Subject: [1103] Skunked or outFOXED ?
Message-ID: <32559802.4937@uts.cc.utexas.edu>

Hey Gang,

After two nights of hunting foxes and not hearing either one I beginning to wonder if the California crowd is taking revenge on good ol Chuck and "sucking" all the RF out of Texas to the West Coast? Maybe that next NorCal project called the SST really stands for "Stealing Signals from Texas". Is the next Burdick design an insidous weapon to keep Chuck off balance? What devious plots have Californians devised for keeping all fox signals out of the Lone Star state?

Signed on during the second hour of both nights this week and didn't hear even a little squeek out of either Fox. Anyone else in Central Texas hear them either? Anyone in the entire state?

So, Chuck...is it too late to give the Texas Fox hunters the two points you took back from California? We may need them if this keeps up!

I know my rig is getting out cuz I had a half hour rag chew with KE6RIE in San Luis Obispo last night (Thursday) and we had solid copy (589 to Doug and 559 back to me) both ways the whole time...though it was after the closing hour of the fox hunt. Heard AE4IC from North Carolina with a nice signal on Thursday night and lots of other QRPer's. Just no foxes. Looked for 'em using a delta loop, an inverted vee, and a vertical antenna with my MXM-40, a pretty sensitive receiver. Nothing. Fox signals weren't coming into Austin...at least not during the second hour of each night. So, who stole 'em?

Conclusion: It can't be blamed on the band conditions. Must be the Californians extracting revenge!!!!

The Belton hamfest is being held tomorrow (Saturday) so QRPer's from Texas unite. Let's get together and plot the re-capture of fox signals to their "proper" (right here in Texas) space.

Have fun, drive safe and see you in the hunt:-).

72,73,

Gary, KJ5VW

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: George Gingell <k3tks@u1.abs.net>
Subject: [1080] Small Wonder Labs NN1G
Message-ID: <Pine.BSI.3.93.961004154142.15984C-100000@u1.abs.net>

Steve,

You asked for information on how to contact Dave Benson, NN1G
of Small Wonder Labs. Here is the information.
Dave Benson, NN1G 80 E. Robbins Avenue, Newington, CT 06111
Telephone (203)667-3536 Email= bensondj@aol.com

72,73 es
QRP DX TU (C) 1986 G.Danny Gingell, K3TKS@.abs.net
Maryland Milliwatt Club QRP Reference Library, (301)572-6789

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: DYARNES@aol.com
Subject: [1020] St. Louis Vertical
Message-ID: <961004033432_201827304@emout11.mail.aol.com>

Somebody posted a phone number for getting source info on the South Bend SD20 and somehow I have lost that posting. Could someone please forward another copy to me. Thanks much.

72 de David W7AQK

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Edward J. Warhover" <kf9xy@apci.net>
Subject: [1060] St. Louis Vertical
Message-ID: <199610041733.MAA30177@hilly.apci.net>

Hi Gang,

Just finished building my St. Louis Vertical, and thought I'd post the results and my comments and modifications. First of all, I am a member of the St. Louis QRP Society, and have seen and used the prototype by Dave Gauding, NF0R. I opted to use a slightly heavier twinlead (22 GA, RS 15-1153) for the coil. My reason for this was to avoid having to splice the coil, since this comes in 50 foot rolls rather than 40 foot rolls. It's not too stiff. It coils nicely around the base unit of the pole. Using this twinlead, I got 135 turns, and used approximately 148 feet of twinlead (The prototype used 142 turns.) At Dave's suggestion, I used a single conductor for the radiator, since it offers less wind resistance. I used 22 GA stranded, insulated wire, with an alligator clip at the lower end, and a solder lug at the top end. The radials are made of the 24 GA twinlead as originally designed. My 1 1/4" dowel had to be reduced somewhat to make it fit the bottom section of the pole. I used a spokeshave and sandpaper. I left the bottom 1 1/2" of the dowel at its original thickness, thus leaving that much protruding from the bottom of the pole. This elevates the base section off the ground to protect the bottom, and to afford a small area to grab the dowel to remove it.

I checked the resonant frequency of the antenna with an MFJ-249 SWR Analyser, and found it to be about 5.2 MHz. One of Dave's design criteria was a low band of 40 Meters, so his comments about possibly using considerably less turns in the coil are right on.

I listened using my Sierra on 40M, and it sounded fine. Will now have to build my St. Louis Tuner, so that I can transmit on this antenna. Thanks Dave for a great little portable antenna.

72,
Ed KF9XY

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Edward J. Warhover" <kf9xy@apci.net>
Subject: [1107] St. Louis Vertical
Message-ID: <199610042351.SAA14067@hilly.apci.net>

Hello again,

I reported earlier today on construction of the St. Louis Vertical. At that time I had only received on it, not transmitted. Well, now I have transmitted, and it works great. I drug an old homebrew L-Network tuner down to the yard, and set up with it and my Sierra on 40M this afternoon. The tuner is a bit bulky, but did a good job. Now to build the much smaller St. Louis tuner for truly portable operation. Incidentally, I forgot to mention I used Doug Hendrick's mod of pulling the conductors out of the notch on the radials, thus leaving the web intact. Makes for a much stronger radial.

72,
Ed KF9XY

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: svecbrdk@well.com (L.Svec,W.Burdick)
Subject: [1022] The next NorCal club project: The SST
Message-ID: <199610040807.BAA10243@mh1.well.com>

Paul, N9AZ, was wondering what NorCal QRP Club projects might be in the works. Well now, it's hard to say *exactly* what these projects will be since the selection process is so nebulous.

Usually a NorCal club project begins life as a nearly imperceptible muscle twitch somewhere on Doug Hendricks' body. Nearly anything can set it off -- perhaps the provocative shape of a mishappen french fry on his California Burger recycled plastic tray. Of course not all of these twitches *start* with Doug, but sympathetic twitching processes far beyond our understanding insure that the idea will pop into his head within seconds.

At this point in a NorCal meeting something happens that is known in chaos theory as a "change in state-space," or in lay terms, Doug gets up, does

the triple jump, and lands at my table. His first word is usually, simply: "Hey!" And at this point I know a club project is about to be born.

(Note: In reality, many club members are involved in the formation of our club projects, but Doug and I are the fastest talkers in the group, so we generally take credit before anyone figures out that it was really Eric's idea, or Vic's, or Jim's, etc. :)

Announcing the SST (Simple Superhet Transceiver)

(if this name has been used already, I apologize!)

The SST is a the next step in the evolution of the 40-9er. The 40-9er turned out to be a great way to get some QRP newcomers to try their hand at home-brew, but its performance was marginal, so I've added a few parts to make it a really interesting rig, yet just as easy (or easier) to build. Also, Doug double-dared me to make a superhet rig that was nearly as simple as the 40-9er but would blow it away in terms of performance. Ever try to turn Doug down? No way. :)

So here is a preliminary description of the new rig:

- It will have only about 65 parts, *half* as many as the original NorCal 40A, and just a few more than the 40-9er. My goal was to re-think every stage in the typical NE602-genre superhet; the result is some compromises and some new circuits not previously described. (By the way, if anyone knows of another superhet CW xcvr with AGC, sidetone, and crystal filter that has 65 or fewer parts, please tell me! I'd like to compare notes with the designer....)

- With any luck the SST will come in versions for 40, 30, and 20 meters, and of course it could be built for 80 as well.

- The receiver will be a superhet, with a simple 2-crystal filter AND the world's simplest AGC ciruit (2 parts!) which works very well. I'll describe it in detail later.

- Like the 40-9er, the SST will run from a 9V lithium battery, so it should be an excellent choice for minimum-weight operations like the Spartan Sprint.

- Unlike the 40-9er, the SST will have plenty of AF output and will have none of the A.M. detection or

instability problems of the 40-9er.

- The PC board will be around 2 x 4", compatible with a particular LMB chassis to be named. Controls and connectors will not be on the board, and we haven't decided whether to supply them (or the box) with the kit.

- Since this is a superhet, the VXO will run at a frequency equal to the sum of the I.F. (intermediate frequency) and the R.F. (radio frequency). This frequency is much higher than the R.F. frequency itself, so the VXO range will be much greater--as much as 40kHz on some bands.

- The VXO and I.F. will both use off-the-shelf, inexpensive crystals available from Digikey (etc.). I have found combinations of standard crystals that give QRP-band coverage on 40, 30, and 20. For example, on 40 meters, the I.F. is 4.000 and the VXO crystal is 11.040. Subtracting gives 7.040. The VXO circuit extends this range to about 7.030 to 7.045, and more range is possible. The club will supply match crystals for the filter and BFO.

- The SST will have TX monitoring, just like the NorCal 40A, to serve as a sidetone signal.

- Output filtering of the transmitter will be better, using a 5-element filter. Output will vary with supply voltage, but I'm shooting for 1/2 watt at 9V and 1W at 12V.

- I'm trying to keep the number of toroids in the kit down to four or less, and the manual will be written for people with zero previous experience. Also, the PC board will *probably* be single sided, like the 40-9er, to simplify debug and modification.

The design is still a bit malleable so send me your suggestions. I have a working prototype, but we haven't yet set a date for kit availability, which depends on the schedules of several club volunteers. Please don't send anyone any money (!). We'll announce the price later, but it is likely to be under $50.

73,
Wayne
N6KR

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Ahrens Tim" <tahrens@devmail.sps.mot.com>
Subject: [1034] The SST
Message-ID: <9609048444.AA844447797@devmail.sps.mot.com>

SST - GO Wayne, GO!!!!

Looking forward to it.

cu

Tim WA5VQK

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: earwax@indy.net
Subject: [1063] tnx ARCI info
Message-ID: <199610041757.MAA13377@IndyNet.indy.net>

Thanks to all for the info.

charlie

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [1057] Trade: Joy of QRP
Message-ID: <199610041704.SAA01303@mail.enterprise.net>

Trade my copy of 'The Joy Of QRP' by Adrian Weiss for your copy of 'The
Hot Water Handbook'.
72/3
--
Frank G3YCC (G QRP 042)
QRP Web Page:
http://homepages.enterprise.net/g3ycc/

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: kb0rol@juno.com (Bradley L Mugleston)
Subject: [1018] tuning up
Message-ID: <19961003.204210.9975.2.kb0rol@juno.com>

Gang,

With all the talk about tuner loss I've been thinking - boy did that hurt - anyway I normally tune my Kenwood TS-830S (Tube Finnals) into a 50 ohm dummy load then use my tuner to tune the antenna. Should I just tune directly into my antenna? Will this help me get more of my LESS THAN 5 WATTS into the antenna? Should I just bypass the tuner/Watt meter all together? (how do I know my power out?)

BTW don't forget - I will be the FOX on Tuesday October 8th on 7.110 from 7:00 to 9:00pm Mountain Time.

Thanks for the Help.

Brad Mugleston - KB0ROL
Colorado QRP Club # 170, QRP-L #316, ARRL
QTH - Aurora, CO - DM79oq
KB0ROL@JUNO.COM
BMUG@GWL.COM

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Bob Reynolds <breynold@sigg.com>
Subject: [1039] TwoFer History -Reply
Message-ID: <96Oct4.093023cdt.19623@firewall.sigg.com>

>>> Bob Cutter <bcutter@teal.csn.net> 10/03/96 05:03pm >>>
The thread on NN1G reminded me of a question I have had
about the TwoFer. A
20M one was my mainstay travel and backpack rig for years, I
still have it.
Two Crystals, 14010 and 14060 with a capacitor that gave me +/-
3KHz. Who
or what group developed the design? I believe I bought my two
boards by
mail from someplace in the NE.

72, Bob KI0G

QBF?   ZUE

Bob Cutter, ...Glenwood Springs, CO

KI0G

bcutter@teal.csn.net

The TWO-FER was a QRP ARCI club project first described in
the July-October 1986 QRP QUARTERLY by John Collins. It alsp
appeared in the June 1988 issue of CQ by Ade Weiss andthe
November 2987 issue of 73 AMATEUR RADIO by Mike Bryce.
The club produced a total of 125 transmitter kits. The receiver
part was never offered. My rig used the club kit with the board cut
doen and the receiver ugly wired. Crystals were 14.060 and
14.015 with a swing of 5kc.. with a the slug tuned inductor
inseries with the xtal, I got about 15 kc swing. Power was 1.4
watts out, so I modifies it for 720 milliwatts!

73, Red K5VOL

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [1112] Vanity call update.
Message-ID: <18140@sugarland.ampr.org>

I got this from Bart Jahnke at ARRL today and thought some might be
interested.

From: "Jahnke, Bart, KB9NM" <bjahnke@arrl.org>
Subject: Vanity Gate 2 Update...
Reply-To: "Jahnke, Bart, KB9NM" <bjahnke@arrl.org>

Subject: ARLB069 FCC Gate 2 update
    Date: 3 Oct 1996 16:46:28 -0400
   From: w1aw@arrl.org
Organization: American Radio Relay League
 Newsgroups: rec.radio.info, rec.radio.amateur.misc
 Followup-To: rec.radio.amateur.misc

SB QST @ ARL $ARLB069
ARLB069 FCC Gt   update

ZCZC AG49
QST de W1AW
ARRL Bulletin 69 ARLB069
>From ARRL Headquarters
Newington CT October 3, 1996
To all radio amateurs

SB QST ARL ARLB069
ARLB069 FCC Gate 2 update

If all goes well at the FCC's Gettysburg, Pennsylvania, office, you might have that new vanity call sign you applied for under Gate 2 in time for the ARRL Sweepstakes CW weekend (November 2-3). A spokesman said this week that the FCC anticipates it could be four weeks or so before any grants are issued to first-day applicants. The FCC said the number of personnel available to enter application information and call sign lists is limited, and that keying in up to 25 call signs and then verifying that they were keyed correctly is not a very fast process.

The FCC will not start making any grants for first-day filers until all day-one applications have been entered into the FCC's computer. Then applications will be processed randomly from among those in the first-day pool.

The number of hams taking advantage of Gate 2 has been less than anticipated. As of September 25, the FCC had received 5297 Gate 2 applications. First-day vanity filers totaled 4527, a number that even surprised the FCC, which had been expecting a larger flood of Gate 2 filings. The FCC said 4188 paper applications and 339 electronic applications were received the first day. Another 770 applications, mostly paper, had showed up by Wednesday, September 25. Slightly more than 7 percent of applicants used the FCC's newly inaugurated electronic filing system.

Among the major headaches for the folks in Gettysburg are applications that contain illegible information. FCC personnel have been instructed to skip over requested call signs they cannot
c
decipher. Also, some electronic filers have been sending their payments to the wrong Post Office Box in Pittsburgh and using the FCC Form 159 designed for use by those filing on paper. The FCC said that contrary to instructions on the electronic application form, electronic filers should not forward a copy of their Amateur Radio license to the FCC by mail. FCC personnel have no way to match up licenses with applications, and they don't need the license copy to process the application.

The FCC said that some applicants apparently have had second thoughts about changing their call signs and have contacted the FCC to pull their Gate 2 paperwork. The FCC says that cannot be done. Those issued a vanity call sign who decide they like their old call sign better will have to pay another 30 dollars and reapply under Gate 1.

If the FCC is unable to grant any of your vanity call sign requests, your application will be dismissed, and the FCC will notify you to that effect. But the Commission will not return your 30 dollar application fee until you request a refund in writing. Unlucky vanity applicants will be informed that ''credit cannot be provided toward future filings,'' and that FCC procedures authorize a refund ''only when requested in writing.'' To take another chance under Gate 2 means completing another Form 610V and sending in another 30 dollar fee.

The FCC has not announced a schedule to open Gates 3 and 4.
NNNN

Good luck to all who applied.
72,
Bill, K5ZTY and gonna stay K5ZTY
ARCI #8817 NORCAL #1321 CQC #178 MI #1472 NE #440 QRP-L #473
WITHOUT CW, IT'S JUST CB

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
Subject: [1054] Variable Length Balanced Line Tuners

>I wonder how I could measure the "balance" of the balanced
>line coming out of my VLBLT to check for any negative
>effects created by the path through the relays? The two
>effects I would expect would be change in impedance and
>(increased) radiation of RF and I should be able to do
>simple measurements of these. But have I got this right?
>Regards, Pete KS4XG

Hi Pete, glad to see you're making progress. Measuring the loss and imbalance through my relays is on my to-do list. Here's how to do it. Replace your antenna with a 300ohm dummy load. Take a reading on the load side of the relays with your Ladder-Lizard. There are no reflections there, the Ladder-Lizard reading is proportional to the current, and all the measured power is going into the dummy load.

Now, under the same conditions, take a few Ladder-Line
readings on the transmitter side of the relays. If there
are reflections caused by the relays, the current will
vary along the 300ohm line. If you take your measurements
on 20m, you should be able to locate a maximum and minimum
reading about 25ft apart using the Ladder-Lizard. Then
the square root of (Imax times Imin) gives you the average
current. The ratio,(Imax/Imin), gives you the SWR. The
SWR tells you the mismatch caused by the relays and the ratio
of the average current squared on the transmitter side to the
current squared on the load side gives you the efficiency
of the power transfer across the relays. Not bad for a
$15 antenna analyzer, eh?

73, Cecil, W6RCA (not speaking for my employer)

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1077] VBT usuage
Message-ID: <199610041943.TAA00071@chuck.dallas.sgi.com>

Gang,

On my NN1G post someone asked about my opinion on the
Variable Bandwidth Tuning (VBT).

Be careful about what you ask for as you may get it. :-)

I have the VBT on the OHR100 and Explorer II series.
I am sorry to say that I don't use it. I have the bandwidth
set for about 600Hz or so and that is where it stays.
Guess I'm used to the days when you were lucky to have
800Hz or less in the bandpass of the receiver in CW position.
Heck, all I had at college was an old S-38C Hallicrafters.
Now there was a receiver that could drift with the best of them.
Bandwidth must have been at least 8KHz. :-)

I like the story that WA6IVC tells that in those days all the
designers were using the same LO designs so all the receivers
and transmitters drifted at the same rate and in the same
direction. It really didn't matter. :-)

I compare the effect of bandwidth to that of driving. When I am
driving in the big city of Dallas I like to know what is going on
all around me. There are a lot of people on the street who seemed

to have gotten their license from the Sears Correspondance School
of Driving. :-) I use the rearview and sideview mirrors
continuously looking to see who's close and where they are
going and in general just doing collision avoidance detection.

In the same manner in a rcvr by being able to hear the person I am
talking to and a little bit on either side I can tell when another
QSO is about to interfere with one in progress or in general how
crowded the band is and a sample of the propagation conditions
and how they are changing. I have been doing my own filtering
so long that it just comes second hand. In fact, if I crank
down the bandwidth to less than 300 Hz I tend to get
claustrophobic and the signal begins to sound too artificial.

So there are a large number of people that seem to be using
the VBT continuously, but I am not one of them. Even during
SS I tend to keep the bandwidth only around 500Hz or so at
best. Just another knob that is on the front panel but doesn't
get used. I like rigs that have audio and tuning and that's it
on the front panel. The 525D has a notch filter and several filters
but I just use the audio filter only without the sharper crystal
filter. The combo is just too sharp for me. Someone tell me what
the added cost is to a rig. 3 varicaps, four resistors, and
one pot? Maybe $5 in cost to the manufacturer.

FYI
: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QSOs=1 STATES(w/c)=1/0 DX=0

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Mike Rhodes" <weightdn@bright.net>
Subject: [1101] W8DN 1, FOXs 1
Message-ID: <199610042240.SAA17360@brutus.bright.net>

Wow!!! Never heard a peep out of Brian! Seemed like all the stations I did
hear were out quite a ways and right at the noise level! I assume the band
was way long but even the stations that I noticed Thursday morning (Z) were
weak this morning. I may have to consider a DSP or something if the rest
are going to be this tough. Oh well, there's always next week. Mama told me
there'd be days like this!

72/73 de Mike / W8DN
weightdn@bright.net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [1058] Web Site
Message-ID: <199610041710.SAA02017@mail.enterprise.net>

Check out my web site for details of a very useful, small and effective
Z-Match.
Enjoy
--
Frank G3YCC (G QRP 042)
QRP Web Page:
http://homepages.enterprise.net/g3ycc/

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: KFGlynn@aol.com
Subject: [1048] WTB: Nye Master Straight Key
Message-ID: <961004115920_536674605@emout16.mail.aol.com>

Hi gang,

If you have a Nye Master Straight Key in good working condition I'd like to
take if off your hands if available.

Please let me know.

Tnx

73 Kevin KB2TEO

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Paul R. Valko" <prvalko@oakland.edu>
Subject: [1036] Re: "free" parts III
Message-ID: <Pine.OSF.3.91.961004100750.13157A-100000@saturn.acs.oakland.edu>

On Fri, 4 Oct 1996, Stephen M Smith wrote:

> This time it's VCRs. Yep, VCRs. What, you might ask, would a VCR have
> in it that a QRPer can use? Well, I'm here to tell ya.

Hmmmmmm.... guess who just got this month's issue of the ARCI QRPp???

This hint is on the cover of the magazine, along with a smashing photo of
a mighty fine 49er :-)

One or two scrap VCRs provide enough small stuff to last me a couple
years.

73 =paul= wb8zjl <--- Watch this space

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [1046] Re: "free" parts III
Message-ID: <Pine.SUN.3.90.961004082301.23879F-100000@vortex.sage.dri.edu>

On Fri, 4 Oct 1996, Paul R. Valko wrote:

> Hmmmmmm.... guess who just got this month's issue of the ARCI QRPp???

Well, close......

The ARCI has the QRP Quarterly.

The NorCal club publishes the QRPp.

> This hint is on the cover of the magazine, along with a smashing photo of
> a mighty fine 49er :-)
>

Hmmmmmm, even tho it's your rig, I have to admit it is nice looking! :-)

> 73 =paul= wb8zjl <--- Watch this space

Yes, Paul won the Oct issue cover photo contest! Congratulations.

73, Ron,

.........KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu...........Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: [1065] Re: "free" parts III

Message-ID: <Pine.GSO.3.93.961004082015.10811E-100000@uhunix5>

> Happy scrounging.
> 73.......Steve, WB6TNL

Better than canabalizing VCRs is tearing into an old TV set. You see them on the curb every trash day - did you ever consider the wealth of components that are contained in one? I've built an entire xmtr from one. The most important item is the variable cap in the UHF tuner (gear reduction, ball-bearing drive). The 12vdc power supply will power any qrp rig.

Good dumpster diving!

7.3W,
Jeff KH2PZ / KH6

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [1121] Re: 6-9'er ???
Message-ID: <19961004.234955.7823.0.wb2vuo@juno.com>

Here's my first run through on a QRP 6 Meter rig. This is just a paper rig right now, but I am going to try to turn out a "real" radio in the not-so distance future...

Years ago, Ed Tilton, W1HDQ had a 1 watt transmitter for 6 Meters, using an 8 MHz oscillator/tripler, doubler, driver and P.A. It was built in a Minibox, and was point-to-point wired. The most recent book with the TX was the "FM & Repeater" book from the ARRL. They reprinted it with a direct FM mod. The TX could be built for about $30, today's prices, minus the Xtal. With a receive converter packaged with the W1HDQ TX, you could run this as an outboard "6-Meter Adapter", but it's not elegant,nor is it convenient to use.

I would like to come up with a VFO-controlled Xcvr in the NN1G format. However, due to the VERY wide range of signals, running from 15,000 uv locals (or greater) to 0.1 uV DX, a better mixer than the NE-602's would be needed. There are many Double-balanced mixers (DBM's) that work great on 6 Meters.

The TX power should be at least 2 watts. This would put your signal at a level around -7 dBc compared to the average 6 Meter RiceBox, such as the Alinco DX-70T or the Kenwood TS-680S. Fortunately, a final for 6 Meters that will deliver 2 - 5 watts is not an expensive device, in fact the

CB-replacement finals will work on 6 M, if you drive them a bit harder. The MRF-476 is rated to 50 MHz, but the gain drops from 12 dB to 7 dB when you go from 28 MHz to 50 MHz.

The easiest rig to put on 6 Meters would be a Direct Conversion transceiver, using an LO on 6 Meters with a DBM for the product detector. The LO would be brought up to a suitable level with and amplifier chain, bringing the LO up from +5 dBm to around +33 dBm to +37 dBm...

(A 0 dBm signal is 1 mW, so +10 dBm is 10 mW, + 20 dBm is 100 mW, +30 dBm is 1 watt and so on...)

Just the first run-through on a DC Transceiver:

==========
A 12.525 MHz VXO would drive a pair of doublers, a buffer and a BPF. This would provide something about +5 to+7 dBm of clean RF from 50.050 - 50.150 MHz (give or take)...

A MCL TUF-1 (or equivalent) DBM would be used as a product detector, with an audio LPF. This audio filter would establish the bandwidth, and with a cut-off frequency of 2 KHz would give you a wide enough bandwidth for SSB or CW...

Due to the low level of atmospheric/cosmic noise, a preamp in front of the RX would be needed, but a JFET or MOSFET would be fine (no need for GaAsFET's this low in the spectrum...)

The TX amplifier chain, up to the +10 to +15 dBm level could be accomplished with MMIC's, a 50-ohm amplifier-in-a-chip, and unconditionally stable in the VHF range. They are Class-A, so they do suck up some juice, but nothing's free in the real world. A 2N3866 or 2N3553 would bring you to +27 to+30 dBm (1/2 to 1 watt), and the 5 watt level could be reached with an MRF476 or equivalent.

T/R switching could be either a small relay, or a pair of 1N4002's (per the W2DUC Solid-State VHF Switch). With the diode switching, you could have QSK on 6 Meters!
==========

In a superhet transceiver, the LO would be a VXO selected to provide the required injection frequency. If you made the filter from, say, 14.318 MHz clock Xtals, the LO would be 35.730 - 35.880 MHz (roughly) for a 50.050 - 50.200 MHz range. Again, the NE-602's wouldn't hack the "real world" of signal levels on the 6 Meter band, and a preamp would be needed to get a reasonable NF for the RX.

I don't have anything lined up for this, but will sketch out something in
the next day or 3...

I am open to suggestions, especially if they would help avoid
re-inventing the wheel...

72/73, Keith, WB2VUO, QRP-L #582
EMPS Q=5 S=2 DX=0
Trustee, KB2YTW/B 10 Mtr Beacon (28.2860 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [1052] Re: 80 Meter Beacon?
Message-ID: <Roam.3.0.844446821.4382.myers@bigboy>

> Did anyone else hear a weak beacon last night on 3581 kHz? Between 0110 and
> 0115 UTC on 10/4/96 I heard the following on 3581 kHz:
>
>   VVV VVV VVV DE FDG FDG FDG AR
>
> The signal was very weak, about a 319 and I had to listen through several
> cycles before I could copy the whole thing. The message was repeated
> continuously at about 15 wpm. Anyone know what/who this is and where?

My first guess is a French marine/utility station, but there are
ute hunters out there that probably know exactly where it is...

Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: PaulKB8N@aol.com
Subject: [1094] Re: antenna tuners
Message-ID: <961004173019_118606597@emout09.mail.aol.com>

Dale,

Great story! I've got a huge collection of "ugly but highly usable" varicaps
and coils. Its quite amazing what you can do with just a handful of parts.
 The values aren't too critical, and cap ranges can always be extended using
parallel silver mica caps. The 365pf broadcast variables are just great, but
care must be taken to remove the trimmer elements (they can be lossy) and

also remove any gunk on the bakelite seperators that could cause losses.
 What look like ugly parts in the junk box can become a thing of beauty in
the hands of a skillful craftsman.

Keep buildin'!! Paul, KB8N

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Bob Hightower <ki7mn@dancris.com>
Subject: [1062] Re: ARCI
Message-ID: <199610041753.KAA07658@dancris.com>

At 12:38 PM 10/4/96 -0500, you wrote:
>Could some one please forward me ARCI's address.
>
>
There are a bunch of folks to contact for different things. Go to
http://www.duke,edu/~djohnson/arcibod.html/ and there is a list of who to
contact about various things.
73,
Bob KI7MN NorCal 1221   ARCI 8918 Qrp-l 271 CQC 274 ARRL (Not in any
order of importance!)

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: ka0yos@arn.net
Subject: [1119] Re: CB to 10 Mtr QRP
Message-ID: <199610050333.WAA27130@arnet.arn.net>

At 01:06 PM 10/3/96 PST, William K Hibbert wrote:
>Back in the late 70's/Early 80's, "73" magazine had a whole grunch of
>conversions for CB sets to 10 Meters, including a couple of
>Cybernet/Hy-Gain units to 10 Mtrs CW. In fact, the 2nd generation 10
>meter beacon I ran (WB1DNM/B & KA1YE/B) ran a Hy-Gain 1 board.
>
>I have given away the conversion data, but was told the other day that
>"73" published a compilation of the conversions. Does anyone happen to
>have the collection, or is it still available? I don't get "73"
>anymore, and have no one locally that does out here in the Swamp...
>
>Email direct, unless you think the info would be of general interest...
>
>72/73, Keith, WB2VUO, QRP-L #582
>EMPS   Q=4 S=1 DX=0
>Trustee, KB2YTW/B 10 Mtr Beacon (28.2860 MHz)

>"In the Depths of the Great Bergen Swamp...FN13ac"
>
I think the info would be of general interest. If you disagree please email it to me as well!

Thanks and 72,
Joe ka0yos

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Jeff Casey <WB5GWB@sprynet.com>
Subject: [1014] Re: Distributed Remote Elmers (DREs)
Message-ID: <199610040453.VAA13361@m7.sprynet.com>

On Thu, 03 Oct 1996, Matt, KB9NQR <kb9nqr@interaccess.com> wrote:
> Jeff,
> I liked your idea and since I have already introduced myself
> visa vi "to QRP or not QRP", here is a progress report...[snip]

Thanks much for the update, Matt. This is just the kind of thing I'm hoping more people will do!

> No QSO's yet. I think my biggest problem right now is timing.
> Most of the time I have been able to get to the radio is
> during the week m-f after 9 pm CDT (0200 UTC). There is a lot
> of noise from foreign broadcast at that time...[snip]

Okay, THAT'S OUR CUE, FELLOW HUNTERS! While you're waiting for that wilyest of all creatures to propagate your way, why not take a quick trot up to the novice band and peek through the underbrush to find Matt, KB9NQR, or other Novices/Tech+s who are band-bound to 40m?? Who knows...I once heard a Wise Old Owl (WOO) profess that "Sojourns into the Novice land oft lead to good propagatory luck." :-)

> Now would you please explain all of the acronyms in your
> signature?

You bet I will. Standby for an environmentally friendly private email. :-)

72,
Jeff
Jeff T. Casey / WB5GWB / Long Island, NY / ARCI ARRL ARS QRP-L
EMPS QSOs=3 STATES(w/c)=3/0 DX=0

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: kd1jv@juno.com (STEVEN WEBER)
Subject: [1055] RE: FREE VCR PARTS
Message-ID: <19960910.174843.5471.3.KD1JV@juno.com>

Being in the TV-VCR fix it business, all I can say is Right On!

Older VCR's are a great source of parts, newer ones have lots of SMT resistors and caps. Even the motors and gears can be handy. They also have a lot of little power RF chokes for decoupling. (100uhy range typicly, read the color code like a resistor) Don't foroget about the TV sets either, the video out driver transistors (three of them are on the card the pic tube plugs into) have a high ft and work good in QRP xmitters.

If your local TV shop is anything like mine, they have a stack of dead VCR's eight feet high! I suspect most shops will give you a couple dead VCRs if you ask nice! When you tell a customer that thier VCR can't be fixed under 40-50 bucks, they tend to say "keep it", then I got to find a way to get rid of the dang things!

And, of course, cordless phones and CB sets are full of RF parts......

One other thing, most if not all, the transistors in a VCR/TV are BCE, and some in a VCR have a built in resistor on the base. If it dosen't "test" right on a meter, chances are its one of these "digital" transistors, and tend to be the "tiny" weird looking ones. While your at it, ask if they have an old NTE or SK replacement book you can have, it will help identify the semi's for you.

Almost time to raid the cash draw and head for Rochester/Boxboro

73, 72 de KD1JV, Steve in NH

"keep your iron hot----I love the smell of flux in the morning"

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>
Subject: [1030] Re: Homebrew VFO and Drift
Message-ID: <v03007800ae7aa1bb08a3@[132.235.72.11]>

Gang,

> Dan Tayloe KK7BD (ex-WB0NVB) Phoenix, AZ   QRPL # 696 wrote that

he was working on a VFO.

Sounds like he's having great success! Keep pluggin' Dan, and I'll CU on the air in a month or so with our homebrewed rigs!

I too, like Dan, am working on a VFO for a 40 meter CW single bander. I was trying to get it ready for the Fox season, but too many things were going on. I'd like to relate some observations learned by the "School of Hard Knocks" method. My VFO is about 2 mhz depending on the frequency of crystal filter I'm going to design. I therefore tested it at 2.1 mhz.

1. The VFO built without any temperature compensation was very stable, with only 30 hz drift from turn on. I used poly caps. The MPF102 series-tuned Colpitts osc (The one seen in all the handbooks.) is ran off an LM7808 voltage regulator.

2. However it would tend to drift downwards in frequency 1600hz AFTER the VFO was warmed up with a nearby lamp. (The VFO is in a circuit board case.) This took about an hour and a half to stablize, that is, for the case and components to be heated evenly. When heating with a lamp it is important to not pay attention to the immediate drift effect of the heating, it is caused by uneven heating of the components. That is, the coil may be heated before the FET, etc.

When the rig is finally finished and the VFO is inside the enclosure and further shiedled from direct heat by the VFO case, all the components will heat fairly evenly. This is unless you park your rig near the camp fire!

> Dan Tayloe KK7BD (ex-WB0NVB) Phoenix, AZ QRPL # 696 wrote:

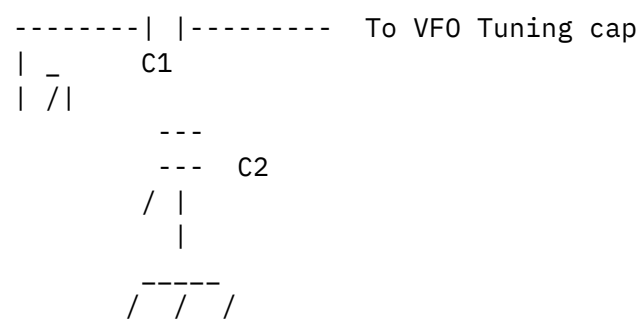
> I got about 800 Hz of drift from power on. This is the
> typical kind of drift that goes on and on seemingly forever in the
> negative direction. ^^^^^^^

3. I noticed this too, when I was first working on it! I thought, "This is amazing! I wonder if the frequency would eventually drop into the audio frequency range?" (Notice I left out the *##!!%#@#!# comments.)
I then remembered that I had soldered the case together about a half hour ago. It took a full two and a half hours for the temperature effect to go away and it finally stablized.

4. My solution was to null out the heating effect and stop the drift. In my case, the frequency was going down with heat, so I needed cap that would have less capacitance as it got hot, thereby raising the resonant frequency and compensate for the heat induced drift.

I found a 100pf ceramic that really changed a lot, by hooking it up to the cap meter and heating it by holding it near a soldering iron. This was going to be my drift corrector cap. (C1)

I put this circuit accross the tuning capacitor:



C2 is a circuit board mounted 30pf variable. By adjusting C2, I could vary the amount of drift correction effect that C1 (100pf) had on the resonant circuit.

Finally I hit it where the VFO is within 60 hz from turn on to being heated by a lamp form ambient temp of 70 degs to at least 90 deg F. This has been the most stable VFO that I had ever built, it is obviously overkill, but I learned a lot!

Main lesson? When working on VFO's, patience is a virtue! Experiment on it while building another section of the rig. That way, you won't hurry it.

vy 73 de NS8O QRP-L #297

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [1100] RE: JOY of QRP, Trade
Message-ID: <199610042234.XAA00398@mail.enterprise.net>

Thanks for the replies, the deal has been done.
Good luck to all.

--
Frank G3YCC (G QRP 042)
QRP Web Page:
http://homepages.enterprise.net/g3ycc/

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [1082] Re: Negative Voltage
Message-ID: <v02140b0bae7b1c877dd4@[198.60.91.132]>

There are a number of neat one chip RS-232 line drivers which include the
low current supplies. You might consider using one of these for the
voltage development and the key/switching....

MAX232 (Maxim, from Digikey is a good one...)

GL Niel

---------- -.. . .-- .- --... ... .-   --------------------
Niel Skousen, SCIENTECH Special Projects   nskousen@scientech.com
208.525.3742, FAX 529.4721 Idaho Falls ID   WA7SSA QRP-L.119

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [1083] Re: Negative Voltage
Message-ID: <Roam.3.0.844459241.19537.myers@bigboy>

> There are a number of neat one chip RS-232 line drivers which include the
> low current supplies. You might consider using one of these for the
> voltage development and the key/switching....
>
> MAX232 (Maxim, from Digikey is a good one...)

The MAX-232 is an RS-232 driver/receiver with an integral voltage
doubler/inverter so it can run off of +5V and generate RS-232
voltages. An ICL7660 (or clone thereof) might be more what is called
for here. However, note that these devices don't have a lot of
current capability and can be a little noisy (RF-wise) if you're
not careful.

Dana KK6JQ

Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: [1066] Re: NN1G Report [long]
Message-ID: <Pine.GSO.3.93.961004082730.10811F-100000@uhunix5>

On Fri, 4 Oct 1996, chuck adams wrote:
> gather up all the parts from a billion places,

A TV set will contain almost all the components one needs.

I'm going to need another cup of coffee to be able to finish reading
your article! =:o

7.3W,
Jeff KH2PZ / KH6

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Ed Tanton N4XY <n4xy@avana.net>
Subject: [1071] Re: Oscilloscopes
Message-ID: <32554FB9.6CD1@avana.net>

Hi Brian...the first thing you should look at on any CRT is whether or not it blooms and/or peaks: as you
advance the intensity control, the trace should-more or less-advance with it. It should ** NOT** reach a peak
and then significantly drop off as you further advance the control. Also, the trace width should widen only
moderately as you do this. Either condition indicates a CRT on its way out (although many less expensive
scopes do bloom to a moderate degree.) If you have a variac, put the calibrator signal onto the screen,
stabilize it, and vary the line input voltage +/- 20%. The amplitude of the signal ought to remain pretty
close to normal. Next, in its most sensitive position, in DC, with Auto-triggering, and at 1ms with a visible
trace across the center of the screen, thump the top of the cabinet. It should not bounce far-if at all, and
should not show a bunch of noise. Take a screwdriver handle and tap various knobs looking for noise/etc. Move
those knobs looking for drastic changes when you just barely moved the knob. Use a

reasonably good voltage
standard or signal and check its approximate calibration. Finally, shift through all the ranges of volts and
time and note that they are all there (e.g. that one particular one doesn't disappear) and that the
transitions seem to be smooth. Check all the variable pots to make sure they work, and are not too noisy
to use. Also, keep in mind whatever applications you plan to use the 'scope for, and make sure that the scope
will display that kind of signal reasonably well-and hopefully accurately. Make sure you're getting a
manual-although in the case of Heath, they are selling copies of most of their equipment. Hope this helps.
--
Ed Tanton N4XY (770) 579-3933 Voice / MBX / FAX Marietta, GA
QRP-ARC GQRP OKQRP QRP-L Adventure RC ARRL AMSAT NCDXA INDXA
email: n4xy@avana.net
URL: Coming Soon

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Stan Goldstein <stan@cruzio.com>
Subject: [1113] Re: power line noise
Message-ID: <3255C221.56E3@cruzio.com>

Jim Hunter wrote:
>
> I have a tremendously high noise level during the day
> --- it quiets down some at night --- I have high
> power lines running very close to my ant.
>
> Is there any filter I can buy that can help this???
> Any suggestions???????
>
> .-

Your best option is to confirm the noise is from the
power lines, then call the power company and have
them solve the problem for you.

The responsibility rests with the power Company and (at
least in California) they are REQUIRED to fix it , if
it is reasonable for them to do so.

A polite call to your power company (AFTER you have
confirmed they are the source) should get results.

BUT if you must ..

There is a product called the anc-4, that is a noise cancelling
filter .

They really do work.

You set up a 2nd antenna (usually just a wire) as close to
the noise source as reasonable and tune out the noise.

The filter works by feeding back the noise , out of phase
to cancel itself out.

The disadvantage is approxiamtely 3db loss due to the dual
antennas (splitting at the input).

I don't have one, but have listened to 30+db noise that goes away..

72.5 Stan , N6ULU

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Denton Bramwell" <denton@cyber-west.com>
Subject: [1118] RE: power line noise
Message-ID: <01BBB225.CF77F560@cyber-west.com>

The normal method of finding the noisy insulator(s) that cause the noise =
is to take about a 10 pound sledge hammer and firmly smack the pole, =
about a foot or two from the ground. When you do that, the noise will =
pop in and out while the pole jiggles. Then call the power company with =
the number(s) of the pole(s). Legally, they have to come fix the bad =
insulators.

Denton
K7OWJ

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: PaulKB8N@aol.com
Subject: [1095] Re: question abt balanced feedline environment
Message-ID: <961004173022_118606641@emout10.mail.aol.com>

In a message dated 96-10-02 20:20:03 EDT, aplitech@spacestar.com (Claton Cadmus) writes:

<< This is coax's only advantage, it is unaffected by it's environment because the R.F field is contained completely within. Well, that's the theory anyway. >>

Yeah. So many people think that the outer shield "holds all the signal inside". Just take a field strength meter and run it along a coaxial line, especially under SWR conditions, and you will learn differently! Paul, KB8N

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [1079] Re: Receiver Filters
Message-ID: <Roam.3.0.844458273.13635.myers@bigboy>

>
> I have a question concerning the proper way to approach filtering on my
> receiver. I have a Yaesu FT-840 transceiver which currently has the
> basic 2.4Khz SSB filter. Now that I'm spending a lot more time on QRP
> CW, this is obviously kind of wide. Even with the notch filter, RIT and
> fairly sensitive ears, I'm having trouble separating weak signals,
> especially on 80 and 40 meters. Before I get a SCAF, DSP or some other
> external filter, should my first step be to get the 500hz internal
> filter? From what I've read on the list, this would be the right move,
> but I want to make sure. I also don't quite understand, if I do get the
> internal filter, how does an external audio filter help unless it goes
> below 500hz? Or should I skip the internal and go directly to the
> external one??

My approach is to place as much of the desired filtering as early as possible in the receiver chain. If you can get an internal 500Hz IF filter for your radio, that's the ideal first choice. Filtering early in the receiver reduces the chance that undesired signals will overload receiver stages before the filter - the overload can cause the desired signal to be 'blocked'.

> I can't afford the higher priced DSPs, so they are not really an option.
> The RS one is a cheap solution, as is the OHR SCAF, but I have a feeling
> neither will be sufficient without the internal filter.

Yup - an external filter may be very useful for reducing undesired signals, but it will work best with an internal filter placed as early as possible. Some radios offer choices of filters at the 1st or 2nd IF - I'd generally opt for better filters at the 1st IF.

Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: sholla@panasonic.atlanta.com (Holland, Steve)
Subject: [1073] RE: Scavenging old TVs (was Re: NN1G Rep
Message-ID: <1996Oct04.152500.1619.54648@ntserver.panasonic.atlanta.com>

The picture tube can retain the high voltage for long periods of time.
 Even if it is discharged to ground, then let sit, it can build up a
deadly voltage/ current mix. Please always be careful even if the set
has been unplugged for years. I have seen a dead tube draw an arc when
grounded. A CRT should always be considered live. Our practice was to
ground the tube while working on the set and then right before power up
we would remove the ground. This provided a little more safety but we
were still careful. 73 de N9HXX/4

Steve N9HXX/4
QRP-L # 555

From: myers[SMTP:myers@bigboy.West.Sun.COM]
Sent: October 04 1996 14:59
Subject: Scanvenging old TVs (was Re: NN1G Repor

> On Fri, 4 Oct 1996, chuck adams wrote:
> > gather up all the parts from a billion places,
>
> A TV set will contain almost all the components one needs.

It is probably worth pointing out to the list that a TV set,
even after it has been turned off for a while, can contain some
lethal charges. Be particularly careful around the picture tube
and flyback circuitry. If a TV set has been turned off for several
days or longer, the chance of encountering these charges is
pretty small, but always practice caution.

****
Steve Holland   MCC Panasonic
sholla@panasonic.atlanta.com   2001 Westside Drive
Phone: (770) 740-2888   Bldg. 200, Suite 260

FAX: (770) 740-8781 Alpharetta, GA 30201
****

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Dale LeDoux <dledoux@laci.net>
Subject: [1105] RE: Scavenging old TVs (was Re: NN1G Rep
Message-ID: <1.5.4.16.19961004172110.0a874018@laci.net>

At 15:15 10/4/96 -0400, you wrote:
>
>The picture tube can retain the high voltage for long periods of time.
> Even if it is discharged to ground, then let sit, it can build up a
>deadly voltage/ current mix. Please always be careful even if the set
>has been unplugged for years. I have seen a dead tube draw an arc when
>grounded. A CRT should always be considered live. Our practice was to
>ground the tube while working on the set and then right before power up
>we would remove the ground. This provided a little more safety but we
>were still careful. 73 de N9HXX/4
>
>Steve N9HXX/4
>QRP-L # 555
>
The phenomenon you witness in the case of the charge 'returning' to the picture tube is dielectric absorption. It is explained in less-technical terms by saying that a high voltage DC field forces electrons into an insulator. The longer the charge is in place the more this action takes place. Discharging the electrode removes the charge from the electrode and those electrons in proximity to it. The remainder of the electrons adsorbed into the insulating material will eventually migrate back to the electrode. If this electrode is grounded during this time, there will be no noticable voltage, but if the electrode is ungrounded, a voltage level equal to the original applied voltage may result. Although the capacity might be small, it can easily result in a nasty accident. TV picture tubes can do this, but it is REALLY impressive after doing a DC test at 65 KV on 8000 feet of high voltage cable. Even though the cable is grounded for a few minutes, if left ungrounded for a while, it will draw a magnificent spark and will snap like a high-power rifle. Inadvertent contact will result in violent physical activity and vocabulary exercise. I speak from personal experience in this matter.

ObQRP: Connect a solid safety ground from the high voltage terminal to the metal chassis before dismantling your used TV.

Dale LeDoux
Bath Electrical Systems
Power Specialists -- 480 V to 230 KV

KD5QI

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "J. Skalski" <jskalski@acsu.buffalo.edu>
Subject: [1027] Re: The next NorCal club project: The SST
Message-ID: <Pine.GSO.3.93.961004083524.9468A-100000@lictor.acsu.buffalo.edu>

If you can keep the price under fifty dollars it can be known as...
the $ 49 er   :-)

73,

Jim N2GO
The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381
jskalski@acsu.Buffalo.EDU

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Bill Meahan <wwm@wa8tzg.mi.org>
Subject: [1108] Re: The next NorCal club project: The SST
Message-ID: <3255a062.wa8tzg@wa8tzg.mi.org>

On 4 Oct 96 at 1:16, L.Svec,W.Burdick wrote:

[description of SST snipped]

> The design is still a bit malleable so send me your suggestions. I have a
> working prototype, but we haven't yet set a date for kit availability,
> which depends on the schedules of several club volunteers. Please don't
> send anyone any money (!). We'll announce the price later, but it is
> likely to be under $50.
>
> 73,
> Wayne
> N6KR

I WANT ONE!! NOW!!

Oops, sorry, just couldn't contain myself :-) There's an ever-growing

pile of Altoids tins in the corner just waiting for something to
stuff into them. Not that the SST will necessarily fit like a 40-9er
but...

Will a KC-1 fit? A KC-2???? (Omigod, a 50$ xcvr with a $75 display!)

Drool, drool, drool!

72,
Bill Meahan WA8TZG wmeahan@wa8tzg.mi.org
ARRL, IMRA, QRP-L(#117), NorCal QRP (#407), G-QRP (#8468), MI-QRP (#M1458)
All statements herein are worth exactly what you paid for them
        cat: a purr bearing mammal

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [1031] Re: to QRP or not QRP?
Message-ID: <FOxsoHAW6gUyEwR+@boco.demon.co.uk>

In article <9610012112.AA19244@artemis.fc.hp.com>, Dale Anderson
<dalea@artemis.fc.hp.com> writes
Snip...
>For me, it's working in the mW
>   range where I have the most fun.

I don't believe 5mw is more difficult to transmit than 5w. I think it
important to applaud the great achievements of QRO ops who manage to
handle QRPp signals: sometimes their efforts are positively heroic.

I believe the purest form of QSO for us is QRP<---->QRP. Sadly, I have
to admit that life really would become difficult if QRO ops dropped
power out to the same level as mine on each QSO.

This may not be what anyone wants/needs to hear but for as long as there
are many times more QRO than QRP stations out there we should offer
praise where praise is due. The QRO type copes with my 5w when I can
barely hear the incoming 100w transmission. I just *know* the hero ain't
me!

I reckon quite a few get hooked by QRP when they realise they have done
the hard part of QRP - reading the QRP signals!

--
Vic G0BVZ   QRP-L 666

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: launerb@crl.com (William H. Launer)
Subject: [1068] Re: to QRP or not QRP?
Message-ID: <v01530500ae7af1656c6c@[192.0.2.1]>

Vic (G0BVZ) wrote:

>I believe the purest form of QSO for us is QRP<---->QRP. Sadly, I have
>to admit that life really would become difficult if QRO ops dropped
>power out to the same level as mine on each QSO.

This reinforces my belief that we (qrp'rs) should pay more attention to
our receivers. Simple, lightweight receivers are a must for backpacking
operations, but for fixed location operation (which is most of the time),
weight is no object. There is no reason the qro ops should be able to
receive qrp signals better than we can!

Enough of my soapbox for a while!

72/73 Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279   qrp arci #3551
Grid Square EM48RT

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: "Denton Bramwell" <denton@cyber-west.com>
Subject: [1117] RE:tuner efficiency
Message-ID: <01BBB225.D4BCD5E0@cyber-west.com>

Interesting write up on tuner efficiency.... use of a constant amplitude =
generator is probably a very good idea. I wonder, however, if the =
output of the 191 is really 50 ohms. Some generators are, and MOST are =
not. One way to check on that possibility is to run the output of the =
191 through about a 6 dB 50 ohm attenuator, and see if you get the same =
results.

Denton
k7owj

From owner-qrp-l@Lehigh.EDU Fri Oct 4 23:12:46 1996
From: Tim Cook <timcook@erinet.com>
Subject: [1102] Re: W8DN 1, FOXs 1
Message-ID: <325593BE.4F4D@erinet.com>

Mike Rhodes wrote:
>
> Wow!!! Never heard a peep out of Brian! Seemed like all the stations I did
> hear were out quite a ways and right at the noise level! I assume the band
> was way long but even the stations that I noticed Thursday morning (Z) were
> weak this morning. I may have to consider a DSP or something if the rest
> are going to be this tough. Oh well, there's always next week. Mama told me
> there'd be days like this!
>
> 72/73 de Mike / W8DN
> weightdn@bright.net
I never heard a thing either Mike, I'm near Dayton, thought it was just
me.. I feel a little better
Tim
NZ8J